16 Unavoidable Adverse Impacts of the Long-Term Plan

The impact analysis did not identify any unavoidable adverse impacts of the Long-Term Plan.

There are some potential impacts that may not be avoidable, if they are realized, associated with the use of larvicides and adulticides. These might include startling of birds associated with the application of aerial larvicides. This is to be mitigated by a reduction in the areas over which the larvicides are to be applied, as progressive water management is implemented across the County's marshes. The reduction of the application of aerial larvicides is forecast to be on the order of 75 percent. The risk assessment also found the possibility of impacts to flying insects with the use of adulticides. It is not clear that this impact will be realized, for a number or reasons, which have been discussed earlier. This is because the impact was based on testing associated with bees. Bees may be more sensitive to pesticides than other insects, the testing methodology may not be entirely appropriate, and the exposure to pesticides, based on modeling, appears to overestimate exposure to a considerable degree (see Section 7). Most measurements of impacts to bees from mosquito control applications have not found impacts that were indicated by the risk assessment modeling (Zhong, 1999; Hester et al., 2001; Caron, 1979; Smith and Stratton, 1986). However, if it is realized, the effect may be minimized by the tendency of flying insects to be mobile, and therefore recolonize an area where insects have been removed. As most adulticide applications are limited in area, the time it will take for such repopulation to occur will be short. A study in California found that recovery takes on the order of a few days to be complete (Jensen et al., 1999); these results were found for other mosquito control chemicals (O'Brien & Gere, 1995). In addition, as was done with larvicides and tiger salamanders, the County has proposed working with NYSDEC and other local wildlife managers to identify insects and potential habitats that appear to be important to preserve for natural resource reasons.

Water management impacts, if projects are not designed and implemented properly, appear to be the most significant potential ecological impacts from the Long-Term Plan. However, processes have been created that intend to minimize opportunities for unsound projects to be implemented. The Long-Term Plan has provided appropriate mechanisms to ensure that potential impacts are indeed avoided.

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Section 16 References

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