## 2023 Report of the Norfolk County Mosquito Control District

NCMCD operations apply an Integrated Pest Management (IPM) approach to mosquito control that is rational, environmentally sensitive, and cost effective.

## Surveillance

NCMCD is engaged in an intensive monitoring process through weekly field collections and data analysis in collaboration with the Massachusetts Department of Public Health (MDPH) to detect for diseasevectoring mosquitoes. Virus isolations assist us in focusing our surveillance to areas of concern, thereby allowing us to alert nearby towns of a potential epidemic. Public requests for service alert us to high numbers of nuisance mosquitoes.

| Virus Isolations in the town: | 15 samples submitted, no isolations in 2023 |
|-------------------------------|---|
| Requests for service:         | 30  |

### Water Management/Source Reduction

The NCMCD reduces the potential for larval mosquito development through a variety of methods under this category. Our Freshwater Water Management Program includes Ditch & Pond Maintenance, as well as Culvert Area Clearing conducted to improve water quality and increase water flow. Tire casing collection is a growing service in which we remove and recycle off rim tires in order to eliminate this source of potential larval mosquito development.

| Culverts cleared                      | 0 culverts |
|---------------------------------------|------------|
| Drainage ditches checked/hand cleaned | 6,680 feet |
| Intensive hand clean/brushing*        | 1,500 feet |
| Mechanical water management           | 0 feet     |
| Tires collected                       | 10         |

\* Combination of brush cutting and clearing of severely degraded drainage systems or streams by hand.

# Larval Control

When mosquito larval habitat management is not possible, larval mosquito abatement is the most environmentally friendly and effective method of mosquito control. An intensive monitoring program, aides in our decision to effectively target culprit locations.

| Spring aerial larvicide applications (April)                         | 96.2 acres |
|--|------------|
| Larval control - briquette & granular applications by hand           | 5.2 acres  |
| Rain basin treatments – briquettes by hand (West Nile virus control) | 643 basins |
| Abandoned/unopened pool or other manmade structures treated          | 0          |

# **Adult Control**

Adult mosquito control is necessary when public health and/or quality of life is threatened either by disease agents, overwhelming populations, or both. Our surveillance program, along with service request data and state of the art GPS and computer equipment, allows us to focus our treatments to targeted areas.

| Adult aerosol ultra-low volume (ULV) applications from | trucks          | 1,035 acres             |
|--|-----------------|-------------------------|
| Barrier applications on municipal property             | 5 applications, | total of 36 gallons mix |

Respectfully submitted,

David A. Lawson, Director