MASSACHUSETTS MOSQUITO CONTROL

ANNUAL OPERATIONS REPORT

Year Report Covers: 2015 Date of Report: 00/08/2016

Project/District Name: **Dukes County Mosquito Control Project**

Address: 9 Airport Road

City/Town: Edgartown Zip: 02539

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Report prepared by: ***Martina Thornton, Dukes County Manager and Richard Johnson***

NPDES permit no. **N/A**

If you have a mission statement, please include it here:

ORGANIZATION SETUP:

Commissioner names:

Matt Poole
Maura Valley
Marina Lent
John Powers
Shirley Fauteux
Julie Sierputoski

Superintendent/Director name: N/A
Superintendent/Director contact phone number:
Asst. Superintendent/Director name:

District/Project website:
http://www.dukescounty.org/Pages/DukesCountyMA_Mosquito/index
Twitter handle: @
Facebook page: http://www.facebook.com/

Staffing levels for the year of this report:
Full time: 0
Part time: 0
Seasonal: 1
Other: 0 (please describe)

Of the above, how many are:
(Please check off all that apply, and list employee name(s) next to each category)

☐ Administrative
☒ Biologist 1(also our surveillance technician)
☐ Educator
☐ Entomologist
☐ Facilities
☐ Information technology
☐ Laboratory
☐ Operations
☐ Public relations
☐ Wetland scientist
☐ Other (please describe)

For the year of this report, the following were maintained (enter number in the column to the left):

0 Modified wetland equipment (list type)
0 Larval control equipment (list type)
0 ULV sprayers (list type)
1 Vehicles
Other (please be specific): 0

Comments: Dukes County only provides seasonal mosquito surveillance.

How many cities and towns are in your service area?* 6
Alphabetical list: Aquinnah, Chilmark, Edgartown, Oak Bluffs, Tisbury, West Tisbury - the surveillance is done in one location in each town on Martha's Vineyard.

Were there any changes to your service area this year? No
Cities/towns added:
Cities/towns removed:

***Please attach a map of your service area (or a website link to that map).**

INTEGRATED PEST MANAGEMENT (IPM):

Check off all services that your district/project currently provides to member cities and towns as part of an IPM program (details will be provided in the sections below):

☐ **Adult mosquito control**
☒ **Adult mosquito surveillance**
☐ **Ditch maintenance**
☐ **Education, Outreach & Public education**
☐ **Larval mosquito control**
☐ **Larval mosquito surveillance**
☐ **Open Marsh Water Management**

☐ **Research**
☐ **Source reduction (tire removals)**
☐ **Other (please list):**

Comments: _____

LARVAL MOSQUITO CONTROL:

If you have a larval mosquito control program, please fill out the section below, else skip ahead to the next section.

Describe the purpose of this program:

What months is this program active?

Describe the types of areas where you use this program:

Do you use:
☐ **Ground application (hand, portable and/or backpack, etc.)**
☐ **Aerial applications**
☐ **Other (please list):**
Comments: _____

List all products that you use for larval mosquito control in the table below (leave blank if not applicable)**:**

Product Name	EPA #	Application Rate(s)	Application Method	Targeted life stage	Habitat Type	Total finished product applied
				Choose one	☐ Catch basins ☐ Containers ☐ Wetland ☐ Other (please list):	
				Choose one	☐ Catch basins ☐ Containers ☐ Wetland ☐ Other (please list):	
				Choose one	☐ Catch basins ☐ Containers ☐ Wetland ☐ Other (please list):	
				Choose one	☐ Catch basins ☐ Containers ☐ Wetland ☐ Other (please list):	
				Choose one	☐ Catch basins ☐ Containers ☐ Wetland ☐ Other (please list):	
				Choose one	☐ Catch basins ☐ Containers ☐ Wetland ☐ Other (please list):	
				Choose one	☐ Catch basins ☐ Containers ☐ Wetland ☐ Other (please list):	

What is your trigger for larviciding operations? (check all that apply)
☐ Best professional judgment
☐ Historical records
☐ Larval dip counts – please list trigger for application:
☐ Other (please describe):
Comments: _____

Please attach a map of your service area (or a website link to that map).

ADULT MOSQUITO CONTROL:

If you have a larval mosquito control program, please fill out the section below, else skip ahead to the next section.

Describe the purpose of this program:

Describe the types of areas where you use this program:

What is the time frame for this program?

Describe the types of areas where you use this program:

Do you use:
☐ **Aerial applications**
☐ **Portable applications**
☐ **Truck applications**
☐ **Other (please list):**
Comments: _____

For each product used, please list the name, EPA #, and application rate(s):

Product Name	**EPA #**	**Application Rate(s)**	**Application Method**	**Total finished product applied**

Please describe the maximum amounts or frequency used in a particular time frame such as season and areas

What is your trigger for adulticiding operations? (check all that apply)
☐ Arbovirus data
☐ Best professional judgment
☐ Complaint calls (Describe trigger for application:)
☐ Landing rates (Describe trigger for application)

☐ Light trap data (Describe trigger for application)
Comments: _____

Please attach a map of your service area (or a website link to that map).

SOURCE REDUCTION (Tire Removals)

If you practice source reduction methods, such as tire removal, please fill out the section below, else skip ahead to the next section.

Please describe your program:

What time frame during the year is this method employed?

Comments: _____

WATER MANAGEMENT/DITCH MAINTENANCE

If you have a water management or ditch maintenance program, please fill out the section below, else skip ahead to the next section.

Please check all that apply:
☐ Inland/freshwater
☐ Saltmarsh
Please describe your program:

For **inland/freshwater water management**, check off all that apply.

Maintenance Type	**Estimate of cumulative length of culverts, ditches, swales, etc. maintained (ft)**
☐ Culvert cleaning	
☐ Hand cleaning	
☐ Mechanized cleaning	
☐ Stream flow improvement	
☐ Other (please list):	

Comments: _____

For **saltmarsh ditch maintenance**, check off all that apply:

Maintenance Type	**Estimate of cumulative length of ditches maintained (ft)**
☐ Hand cleaning	
☐ Mechanized cleaning	
☐ Other (please list):	

Comments: _____

What time frame during the year is this method employed?

Comments: _____

Please attach a map of ditch maintenance areas (or a website link to that map).

OPEN MARSH WATER MANAGEMENT

If you have an Open Marsh Water Management program, please fill out the section below, else skip ahead to the next section.

Describe the purpose of this program:

What months is this program active?

Please give an estimate of total square feet or acreage:

Comments: _____

Please attach a map of OMWM areas (or a website link to that map).

MONITORING (Measures of Efficacy)

Describe monitoring efforts for each of the following:

Aerial Larvicide – wetlands:

Ground ULV Adulticide:

Larvicide – catch basins:

Larvicide-hand/small area

Open Marsh Water Management:

Source Reduction:

Other (please list):

Provide or list standard steps, criterion, or protocols regarding the documentation of efficacy (pre and post data), and resistance testing (if any):

Check the boxes below, indicating if your program has performed any of the following:

Research Project	**Details**
Bottle assays	
Efficacy testing	
Other:	
Other:	

ADULT MOSQUITO SURVEILLANCE

If you have an adult mosquito surveillance program, please fill out the section below, else skip ahead to the next section.

Describe the purpose of this program: Surveillance for positive testing

What months is this program active? July, August, September

Check off all trap types currently in use by your program:

- ☐ ABC light traps
- ☐ ABC light traps w/CO_2
- ☐ CDC light traps
- ☐ CDC light traps w/CO_2
- ☒ Gravid traps
- ☐ Landing rate tests
- ☐ NJ light traps
- ☐ NJ light traps w/CO_2
- ☐ Ovitraps
- ☐ Resting boxes
- ☐ Other (please describe):

- ☐ Canopy
- ☐ Canopy
- ☐ Canopy
- ☐ Canopy
- ☐ Canopy
- ☐ Canopy

Do you maintain long-term trap sites in any of your areas? No

If yes, please describe how you chose these long-term sites:

Please check off the species of concern in your service area:

- ☐ *Ae. albopictus*
- ☐ *Ae. cinereus*
- ☐ *Ae. vexans*
- ☐ *An. punctipennis*
- ☐ *An. quadrimaculatus*
- ☐ *Cq. perturbans*
- ☒ *Cx. pipiens*
- ☒ *Cx. restuans*
- ☐ *Cx. salinarius*
- ☐ *Cs. melanura*
- ☐ *Cs. morsitans*
- ☐ Other (please list):

- ☐ *Oc. abserratus*
- ☐ *Oc. canadensis*
- ☐ *Oc. cantator*
- ☒ *Oc. j. japonicus*
- ☐ *Oc. sollicitans*
- ☐ *Oc. taeniorhynchus*
- ☐ *Oc. triseriatus*
- ☐ *Oc. trivittatus*
- ☐ *Ps. ferox*
- ☐ *Ur. sapphirina*

Do you participate in the MDPH Arboviral Surveillance program? Yes
How many pools do you submit weekly on average? 1.2 in 2015

Number of traps in your service area **placed by MDPH**: 0
Were these long-term trap sites or supplemental trapping sites? Choose one

Which arboviruses were found in your area during the previous mosquito season? Enter the number of pools/cases below:

Arbovirus	**Positive Mosquito Pools**	**Equine Cases**	**Human Cases**
☐ Eastern Equine Encephalitis (EEE)			
☐ West Nile Virus (WNV)			
☐ Other (please list):			

Comments: none found

For each arbovirus listed below, please list the risk levels in your project area at both the start and end of the season (if more than one, please list all):

Arbovirus	**Start of Season**	**End of Season**
EEE		
WNV		

Comments: _____

EDUCATION, OUTREACH & PUBLIC RELATIONS

If you have an education/outreach program, please fill out the section below, else skip ahead to the next section.

Describe the purpose of this program: Yes

What time frame during the year is this method employed? Year round

Check off all education/outreach methods that were performed by your program this year:

- ☐ Development/distribution of brochures, handouts, etc.
- ☐ Door-to-door canvassing (door hangers, speaking to property owners, etc.)
- ☐ Facebook page, Twitter, or other social media
- ☐ Mailings (Describe target audience(s):)
- ☐ Media outreach (interviews for print or online media sources, press releases, etc.)
- ☐ Presentations at meetings
- ☐ School-based programs, science fairs, etc.
- ☐ Tabling at events (local events, annual meetings, etc.)
- ☒ Website
- ☐ Other (please describe):

Estimate the audience reached this year using the education/outreach methods above:
Comments:

List your program's top 3 education/outreach activities for this year:

1. _____
2. _____
3. _____

Were you involved in any collaborations with the following partners this year? Provide details below, including a list of technical reports, white/grey papers, journal publications, trade magazine articles, etc:

- ☐ Academia
- ☐ Another mosquito control district/project
- ☐ Another state agency (DCR, DPH, etc.)
- ☐ Environmental groups
- ☐ Industry

List any training/education your staff received this year:

Please list the certifications and degrees held by your staff:

Comments: _____

INFORMATION TECHNOLOGY (IT)

Does your program use (check all that apply):

☐ Aerial Photography
☐ Databases
☐ Dataloggers (monitoring for temperature, etc.)
☐ GIS mapping (Describe:)
☐ GPS equipment
☐ Smartphones
☐ Tablets/Toughbooks
☐ Other (please describe):

Describe any changes/enhancements in IT from the previous year:

Describe any difficulties your program had with IT software/equipment this year:

Comments: _____

REVENUES & EXPENDITURES

Please provide the amounts for your approved budgets for the current, previous, and future fiscal years. Please note if the budget for the next fiscal year is an estimate, or put "n/a" if it is not yet available.

Fiscal Year	Approved Budget
2015	7,500
2016	N/A

List each member municipality, along with the corresponding (cherry sheet) funding assessment dollar amount, for the current fiscal year (or provide a web link to this information):

Comments: <u>The cost is paid by each Town's Board of Health (not on cherry sheet). They pay their portion of the actual expenses at the end of the season.</u>

SERVICE REQUESTS

How many service requests did you receive this season? N/A
How many were for larviciding?
How many were for adulticiding?

Was this an increase or decrease over last season? Choose one

Comments:

EXCLUSIONS

How many exclusion requests did you receive this season? N/A

Was this an increase or decrease over last season? Choose one

Do you have large areas of pesticide exclusion, such as estimated or priority habitats? Choose one

If yes, please explain, and attach maps or a web link if possible.

SPECIAL PROJECTS

Did your program perform any of the following special projects? Check all that apply.

- ☐ Inspectional services (inspections at sewage treatment facilities, review of subdivision plans, etc.)

  Describe:

- ☐ Work with DPW departments or other local or state officials to address stormwater systems, clogged culverts, or other areas identified as man-made mosquito problem areas

  Describe:

- ☐ Work with groups as described above on long term solutions?

  Describe:

- ☐ Conduct or participate in any cooperative research or restoration projects?

  Describe:

- ☐ Participate in any state/regional/national workgroups or panels, or attend any meeting pertaining to the above?

  Describe:

- ☐ Work on any biological control projects, such as enhancement of habitat for native predators, release of predatory fish or invertebrates, etc.?

  Describe:

CHILDREN AND FAMILIES PROTECTION ACT (CFPA)

Is your program impacted by the CFPA? No

If yes, please explain:

If you have data on compliance rates with the CFPA within your program area, please list here:

Describe any difficulties you have had with the implementation of your program due to the CFPA, please elaborate here:

Comments:

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT PROGRAM

Did your program report any adverse incidents during this reporting period? No

If yes, please list any corrective actions here: _____

GENERAL COMMENTS

Please add any comments here for topics not covered elsewhere in this report: _____