## **MASSACHUSETTS MOSQUITO CONTROL**

## ANNUAL OPERATIONS REPORT

Year Report Covers: 2023 Date of Report: 1/31/24

Project/District Name: **<u>Dukes County Mosquito Control Project</u>** 

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Report prepared by: Patrick Roden-Reynolds

NPDES permit no.

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

ORGANIZATION SETUP:		
Commissioner names:		
<del></del>		
<del></del>	<del></del>	
	<del></del>	
Superintendent/Director	r name:	
Superintendent/Director		er:
Asst. Superintendent/Di		
District/Project website:	http://	
Twitter handle: @		
Facebook page: http://w	ww.facebook.com/	
Other social media accou		
Staffing levels for the year	ar of this report:	
Full time: 1		
Part time:		
Seasonal:		
Other: 1 (please describe	) Intern	

(Please check off all that apply, and list employee name(s) next to each category)
<ul> <li>Administrative</li> <li>Biologist Patrick Roden-Reynolds</li> <li>Educator</li> <li>Entomologist</li> <li>Facilities</li> <li>Information technology</li> <li>Laboratory</li> <li>Operations</li> <li>Public relations</li> <li>Wetland scientist</li> <li>Other (please describe) Field Technician Intern</li> </ul>
For the year of this report, the following were maintained (enter number in the column to the left):
Modified wetland equipment (list type)  Larval control equipment (list type)  ULV sprayers (list type)  Vehicles  Other (please be specific):
Comments:
How many cities and towns are in your service area?* 6 Alphabetical list: Aquinnah, Chilmark, Edgartown, Oak Bluffs, Tisbury, West Tisbury
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):
<ul> <li>Adult mosquito control</li> <li>Adult mosquito surveillance</li> <li>Ditch maintenance</li> <li>Education, Outreach &amp; Public education</li> <li>Larval mosquito control</li> <li>Larval mosquito surveillance</li> <li>Open Marsh Water Management</li> <li>Research</li> </ul>

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	Application	Targeted life	Habitat Type	Total finished
		Rate(s)	Method	stage		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):	

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

Product Name	EPA#	Application	Application	Targeted life	Habitat Type	Total finished
		Rate(s)	Method	stage		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):	

Best professi	ional judgment cords unts – please list e describe):		check all that apply)		
Please attach a	map of your serv	ice area (or a w	ebsite link to that ma	p).	
ADULT MOSQUI		ogram, please fill d	out the section below, else	skip ahead to the next section	n.
Describe the pu	rpose of this prog	ram:			
What is the time	e frame for this pr	rogram?			
Describe the typ	es of areas where	e you use this p	rogram:		
Do you use:  Aerial applic Portable app Truck applic Other (pleas Comments:	olications ations e list): 	the name EPA	#, and application rat	o(s):	
Product Name	EPA #	Application	Application Method	Total finished	
		Rate(s)	Method	product applied	
Please describe season and area		mounts or freq	uency used in a parti	cular time frame such a	эs
Arbovirus da Best professi Complaint ca Landing rate		ger for application	n )		

Please attach maps of your service areas (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 meth	od employed?
Comments:	
-	
WATER MANAGEMENT/DITCH MAINTENAN	
	e program, please fill out the section below, else skip ahead
to the next section.	
Places check all that apply:	
Please check all that apply:  Inland/freshwater	
Saltmarsh	
Please describe your program:	
riease describe your program.	
For inland/freshwater water management,	check off all that apply
Maintenance Type	Estimate of cumulative length of culverts, ditches,
Walled Type	swales, etc. maintained (ft)
Culvert cleaning	
Hand cleaning	
Mechanized cleaning	
Stream flow improvement	
Other (please list):	
Comments:	
<u></u>	
For saltmarsh ditch maintenance, check off a	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 meth	nod employed?
Comments:	

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

<b>OPEN MARSH WATER MANAGEN</b>	MENT
If you have an Open Marsh Water Mana next section.	agement program, please fill out the section below, else skip ahead to the
Describe the purpose of this prog	gram:
What months is this program acti	ive?
Please give an estimate of total so	quare feet or acreage:
Comments:	
Please attach a map of OMWM a	areas (or a website link to that map).
MONITORING (Measures of Effic	асу)
Describe monitoring efforts for e	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, crit (pre and post data), and resistance	terion, or protocols regarding the documentation of efficacy ce testing (if any):
Check the boxes below, indicating	g if your program has performed any of the following:
Research Project	Details
Bottle assays	
Efficacy testing	
Other:	
1 11 11 11 11 1 1 1 1 1 1 1 1 1 1 1 1	1

## **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: Adults collected for routine arbovirus surveillance.

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

Check off all trap types used this past season by your program:

тар Туре	e Canopy?	
	(check box for yes)	(leave blank if zero)
ABC light trap		
ABC light trap w/CO <sub>2</sub>		
CDC light trap		
CDC light trap w/CO <sub>2</sub>		
Gravid trap		6
Landing rate test		
NJ light trap		
NJ light trap w/CO₂		
Ovitrap		
Resting box		
Other (please describe):		
Other (please describe):		
Other (please describe):		

Do you maintain long-term trap sites in any of your areas? No If yes, how many:

Please check off the species <b>of concern</b> in your	service area:
Ae. albopictus	Oc. abserratus
Ae. cinereus	Oc. canadensis
Ae. vexans	Oc. cantator
An. punctipennis	🔀 Oc. j. japonicus
An. quadrimaculatus	Oc. sollicitans
Cq. perturbans	Oc. taeniorhynchus
🔀 Cx. pipiens	Oc. triseriatus
🔀 Cx. restuans	Oc. trivittatus
Cx. salinarius	Ps. ferox
Cs. melanura	Ur. sapphirina
Cs. morsitans	
Others (please list):	

How many pool Total number o	ate in the MDPH Arbovi s do you submit weekly f adult mosquito pools t mosquito pools collec	on average? 2 submitted to DPH th	is pa	st season: 70	nitted"): 0
	f adult mosquitoes subi t mosquitoes collected	•			
	rap collections this seas collections of note (plea	· · · · · · · · · · · · · · · · · · ·			
•	s in your service area <b>p</b> g-term trap sites or sup	-	sites i̇́	supplemental	
	ses were found in your tive pools and/or cases		mos	squito season?	Enter the
Arbovirus		Positive Mosquito Po	ools	Equine Cases	Human Cases
Eastern Equ	ine Encephalitis (EEE)	•		•	
West Nile V	· · · · · · · · · · · · · · · · · · ·				
Other (pleas	•				
	rus listed below, please season (if more than on		youi	<sup>-</sup> project area a	t both the start
Arbovirus	Start of Season		End	of Season	
EEE	Remote		Ren	note	
WNV	Low		Low	<b>J</b>	
Comments:		ATIONS			
	UTREACH & PUBLIC REI				
If you have an edu	cation/outreach program, p	lease fill out the section <i>b</i>	oelow,	, else skip ahead t	o the next section.
Describe the pu	rpose of this program:	Educate the public o	n mc	squito prevent	ion and safety
What time fram	ne during the year is this	s method employed?	Ma	y-October	
Development Door-to-doo Facebook particle Mailings (De Media outre	ucation/outreach meth nt/distribution of broch or canvassing (door han age, Twitter, or other so escribe target audience each (interviews for prin ns at meetings	ures, handouts, etc. gers, speaking to proceed to the proceed octains the proceed octains and the proc	pert	y owners, etc.)	·

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: 250 Comments:
List your program's top 3 education/outreach activities for this past year:  1. Agricultural Society Fair  2. HarvestFest at Agricultural Society  3. Local public health fairs
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: Master of Science
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:

REVENUE	S & EXPENDITU	JRES	
Please en	ter your approv	red budgets for the	current, previous, and future fiscal years.
	Date of Fiscal Year	Approved Budget	Notes
Previous	1		
Current			
Future			
	ount, for the cu		ne corresponding (cherry sheet) funding assessment provide a web link to this information):
SERVICE F	REQUESTS		
How man	y service reque y were for larvi y were for adul	_	his season? 0
Was this a	an increase or d	lecrease over last se	eason? Choose one
Comment	ts:		
EXCLUSIO	NS		
How many exclusion requests did you receive this season? 0			
Was this an increase or decrease over last season? Choose one			
Do you ha	ave large areas	of pesticide exclusio	on, including priority habitat? Choose one
SPECIAL P	ROJECTS		
Did your բ	orogram perfor	m any of the followi	ng special projects? Check all that apply.
•su	] Inspectional s bdivision plans		at sewage treatment facilities, review of
De	escribe:		
• Sy:	=	•	other local or state officials to address stormwater reas identified as man-made mosquito problem

areas

Describe:

<ul> <li>Work with groups as described above on long term solutions?</li> <li>Describe:</li> </ul>
<ul> <li>Conduct or participate in any cooperative research or restoration projects?</li> <li>Describe:</li> </ul>
<ul> <li>Participate in any state/regional/national workgroups or panels, or attend any meeting pertaining to the above?</li> <li>Describe:</li> </ul>
<ul> <li>Work on any biological control projects, such as enhancement of habitat for native predators, release of predatory fish or invertebrates, etc.?</li> <li>Describe:</li> </ul>
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: