MASSACHUSETTS MOSQUITO CONTROL

ANNUAL OPERATIONS REPORT

Year Report Covers: 2022 Date of Report: 2/3/2022

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

Address: 29 Breakdown Lane

City/Town: Tisbury Zip: 02568

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Report prepared by: Patrick Roden-Reynolds

NPDES permit no.

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

ORGANIZAT	ION SETUP:
Commission	er names
Commission	er names.
	
Superintend	lent/Director name:
-	lent/Director contact phone number:
-	ntendent/Director name:
District/Proj	iect website: http://
Twitter hand	• • •
Facebook pa	age: http://www.facebook.com/
Staffing leve	els for the year of this report:
Full time: 1	,
Part time:	
Seasonal:	
Other:	(please describe)



(Please check off all that apply, and list employee name(s) next to each category)
Administrative Biologist 1 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):
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):
 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	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
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				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:									
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 Application Total finished Rate(s) Method 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)	
	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	noa employea?
Comments	
Comments:	
WATER MANAGEMENT/DITCH MAINTENAN	CF
*	te program, please fill out the section below, else skip ahead
to the next section.	e. e.g. am, prease jiii out the section below, else ship affeau
Please check all that apply:	
Inland/freshwater	
Saltmarsh	
Please describe your program:	
For inland/freshwater water management,	· · · ·
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):	
Other (please list): Comments:	
Comments:	
Comments: For saltmarsh ditch maintenance, check off	
Comments:	all that apply: Estimate of cumulative length of ditches maintained (ft)
Comments: For saltmarsh ditch maintenance, check off	Estimate of cumulative length of ditches maintained
Comments: For saltmarsh ditch maintenance, check off Maintenance Type	Estimate of cumulative length of ditches maintained
Comments: For saltmarsh ditch maintenance, check off Maintenance Type Hand cleaning	Estimate of cumulative length of ditches maintained
Comments: For saltmarsh ditch maintenance, check off Maintenance Type Hand cleaning Mechanized cleaning	Estimate of cumulative length of ditches maintained
For saltmarsh ditch maintenance, check off Maintenance Type Hand cleaning Mechanized cleaning Other (please list):	Estimate of cumulative length of ditches maintained
For saltmarsh ditch maintenance, check off Maintenance Type Hand cleaning Mechanized cleaning Other (please list):	Estimate of cumulative length of ditches maintained (ft)
For saltmarsh ditch maintenance, check off Maintenance Type Hand cleaning Mechanized cleaning Other (please list): Comments:	Estimate of cumulative length of ditches maintained (ft)

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

OPEN MARSH WATER MANAGEN If you have an Open Marsh Water Mana next section.	gement program, please fill out the section below, else skip ahead to the							
Describe the purpose of this prog	ram:							
What months is this program active?								
Please give an estimate of total square 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, criterion, or protocols regarding the documentation of efficacy (pre and post data), and resistance 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:								
Other:								
= = =	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: Monitor adult mosquitoes for West nile virus

What months is this program active? July-October

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

Trap Type	Canopy?	Number of traps		
	(check box for yes)	(leave blank if zero)		
ABC light trap				
☐ ABC light trap w/CO₂				
CDC light trap				
☐ CDC light trap w/CO₂				
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):				
6 Please check off the species of concer	n in vour service area:			
Ae. albopictus	Oc. abserrat	tus		
Ae. cinereus	Oc. canaden			
Ae. vexans	Oc. cantato	r		
An. punctipennis	🔀 Oc. j. japoni	cus		
An. quadrimaculatus	🗌 Oc. sollicitar	าร		
Cq. perturbans	Oc. taeniorh			
Cx. pipiens	Oc. triseriat			
∑ Cx. restuans	U Oc. trivittatı	us		
Cx. salinarius	Ps. ferox			
Cs. melanura	Ur. sapphirii	na		
Cs. morsitans				
Others (please list):				
Number of adult mosquitoes collected	•	·		

Number of adult mosquitoes collected this season (whether submitted to DPH or not): 538 Number of adult mosquito pools collected this season (submitted and unsubmitted): 48 Number of ovitrap collections this season, if any: 0

Any other trap collections of note (please describe): 0

Do you participate in the MDPH Arboviral Surveillance program? Yes Total number of adult mosquito pools submitted to DPH this past season: 48 How many pools do you submit weekly on average? 3

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)	4	0	0
Other (please list):			

Albovilus	1 Ositive iviosquito 1 oois	Equilic Cases	Haman Cases
Eastern Equine Encephalitis (EEE)			
West Nile Virus (WNV)	4	0	0
Other (please list):			

	_	_					

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	remote	remote
WNV	Low	Moderate

Comments:	
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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: Educate public on mosquito prevention and safety

What time frame during the year is this method employed? May-October

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):
$oxed{\boxtimes}$ 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 Website
Other (please describe):

Estimate the audience reached this year using the education/outreach methods above: 1000 Comments:

List your	program's	top 3	education/	outreach"	activities	for this	year:
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- 1. MV Agricultural Fair
- 2. Presentations to local boards of health
- 3. <u>distributing brochures</u>

below, inc	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							
	Academia Another mosquito control district/project						
=	•	(DCR, DPH, etc.)					
=	nmental group	• • •					
Industr	y .						
List any tra	List any training/education your staff received this year:						
Please list	Please list the certifications and degrees held by your staff:						
Comments	s:						
INFORMA	TION TECHNO	LOGY (IT)					
Does your	program use (check all that apply):					
=	Photography						
Databa							
=		ing for temperature,	etc.)				
=	pping (Describ	e:)					
	· ·						
=	Toughbooks						
=	please describ	e):					
	(p.case aesos	- 7.					
Describe a	ny changes/en	hancements in IT fro	om the previous year:				
Describe a	ny difficulties y	your program had wi	th IT software/equipment this year:				
Comment	s:						
REVENUES	& EXPENDITU	JRES					
Please ent	er your approv	ed budgets for the c	current, previous, and future fiscal years.				
	Date of Fiscal	Approved Budget	Notes				
Duni	Year						
Previous Current							
CULLCILL		1	1				

Future
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:
SERVICE REQUESTS
How many service requests did you receive this season? 0 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? 0
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:
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: Investigated cemetery grounds for concern of containers with standing water near a trapping site with multiple WNV+ samples. Area was deemed not a significant source or great concern.
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? Choose one
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: