MASSACHUSETTS MOSQUITO CONTROL

ANNUAL OPERATIONS REPORT

Year Report Covers: 2019 Date of Report: 1/23/2020

Project/District Name: **East Middlesex Mosquito Control Project**

Address: 11 Sun St.

City/Town: Waltham Zip: 02453

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Report prepared by: ***Brian Farless***

NPDES permit no. **MAG87A020**

If you have a mission statement, please include it here: The East Middlesex Mosquito Control Commission (the Commission) represents the interests of the participating communities and their residents in providing guidance and oversight to the East Middlesex Mosquito Control Project (the Project). The Commission strives to ensure that member communities receive services that are consistent with applicable laws and justified by the tenets of public health, vector control, environmental safety and fiscal responsibility. Integrated mosquito management services provided by the Project and approved by the Commission will be based on the State's Generic Environmental Impact Report on Mosquito Control in Massachusetts, the Massachusetts Arbovirus Surveillance and Response Plan and the policies of the State Reclamation and Mosquito Control Board.

ORGANIZATION SETUP:

Commissioner names:

Executive Committee: Lenny Izzo, Chair, representing Wellesley; Natasha Waden, Arlington; Heidi Porter, Bedford; Christine Mathis, Burlington; and Jennifer Murphy, Winchester. Other Commissioners or town representative include the following: Wesley Chin, Belmont; Patrick Maloney, Brookline; Wendy Robinson, Cambridge; Anthony Kiszewski, PhD, Concord; Elaine Silva, Everett; Sam Wong, Framingham; Kari Sasportas, Lexington; Elaine Carroll, Lincoln; Chris Webb, Malden; Kelly Pawluczonek, Maynard; MaryAnn O'Connor, Medford; Ruth Clay, Melrose and Wakefield; Kyle Simpson, Newton; Bob Bracey, North Reading; Laura Vlasuk, Reading; William Murphy, Sudbury; Tom Creonte, Waltham; Larry Ramdin, Watertown; Julia Junghanns, Wayland; Rich Sullivan, Weston.

Superintendent/Director name: Brian Farless

Superintendent/Director contact phone number: 781-899-5730
Asst. Superintendent/Director name: Mike Bryant/ Chris Gagnon

District/Project website: http://sudbury.ma.us/emmcp/
Twitter handle: @
Facebook page: http://www.facebook.com/

Staffing levels for the year of this report:
Full time: 4
Part time:
Seasonal: 6
Other: in addition to above, two full time and one part-time administrative workers share their time between Suffolk County Mosquito Control and East Middlesex Mosquito Control (please describe)

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

☒ Administrative Brian Farless, Katherine Swan, Dave Henley
☐ Biologist
☐ Educator
☒ Entomologist Doug Bidlack, Ph.D.
☒ Facilities Brian Farless, Mike Bryant, Chris Gagnon
☐ Information technology
☒ Laboratory Doug Bidlack, Ph.D.
☒ Operations Full-time: Mike Bryant, Chris Gagnon, Doug Bidlack, Brian Farless, Cameron Kelley, Peter Mirata. Seasonal: Jessica Gavin, Matt Restuccia, Sal Restuccia, Peter Mirata, Konrad Musialowski, Daniel Serafini
☒ Public relations Brian Farless, Katherine Swan, Doug Bidlack, Ph.D.
☐ Wetland scientist
☐ Other (please describe)

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

1 Modified wetland equipment (list type) Linkbelt 75 Spin Ace track mounted excavator
8 Larval control equipment (list type) 3 Solo backpack pump sprayers and 5 B&G pump sprayers.
2 ULV sprayers (list type) Clarke Cougar Smartflow with radar
8 Vehicles
Other (please be specific): Stihl backpack mistblower

Comments: _____

How many cities and towns are in your service area?* 26
Alphabetical list: Arlington, Bedford, Belmont, Brookline, Burlington, Cambridge, Concord, Everett, Framingham, Lexington, Lincoln, Malden, Maynard, Medford, Melrose, Newton, North Reading, Reading, Sudbury, Wakefield, Waltham, Watertown, Wayland, Wellesley, Weston, Winchester

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: This program is focused on controlling larvae of spring floodwater species, summer floodwater species and artificial container species. Spring floodwater species are aggressive mammal biting mosquitoes that are active during the late spring and early summer. Summer floodwater mosquitoes are controlled because they are aggressive mammal biting species and human vectors of EEE. Brackish water species are aggressive mammal biting mosquitoes. Catch basin larviciding helps control Culex species. Culex species are the primary vectors for West Nile virus in Massachusetts.

What months is this program active? Spring floodwater mosquito larvae are controlled from late March through May. Summer floodwater mosquito larvae are controlled from late May through September. Culex mosquito larvae are controlled from May through September.

Describe the types of areas where you use this program: Intermittently flooded wetlands, stormwater detention basins, catch basins, neglected swimming pools and other water holding containers.

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**
Altosid Pellets	2724-448	8 grams per catch basin	hand applied	Larvae	☒ Catch basins ☐ Containers ☐ Wetland ☐ Other (please list):	436.3367 pounds
Altosid Pellets WSP	2724-448	1 packet per catch basin	hand applied	Larvae	☒ Catch basins ☐ Containers ☐ Wetland ☐ Other (please list):	159.9101 pounds
Altosid XR Briquets, Ingot design	2724-421	1 briquet per basin	hand applied	Larvae	☒ Catch basins ☐ Containers ☐ Wetland ☐ Other (please list):	128.6466 pounds
Vectobac 12 AS	73049-38	8 oz. per acre/ 12 oz. per acre	backpack pump sprayer	Larvae	☐ Catch basins ☐ Containers ☒ Wetland ☐ Other (please list):	5.5 gallons
Vectobac G	73049-10	5 lbs. per acre	aerially applied	Larvae	☐ Catch basins ☐ Containers ☒ Wetland ☐ Other (please list):	9,920 pounds
Vectolex WSP	73049-20	1 packet per catch basin	hand applied	Larvae	☒ Catch basins ☐ Containers ☐ Wetland ☐ Other (please list):	1099.0057 pounds
FourStar 90 day	83362-3	1 briquet per basin	hand applied	Larvae	☒ Catch basins ☐ Containers ☐ Wetland ☐ Other (please list):	105.8 pounds

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: 3 larvae per 10 samples
☐ Other (please describe):
Comments: Altosid Pellets and Altosid Pellets WSP are applied to catch basins during May and June as a pre-emergence treatment to control Culex larvae. Altosid Pellets, Altosid Pellets WSP, and Vectolex WSP were used to control Culex larvae in catch basins in July, August and September.

Please attach a map of your service area (or a website link to that map).
sudbury.ma.us/emmcp/

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: To reduce the number of mammal biting mosquitoes and EEE/WNV vector species.

What is the time frame for this program? May through September

Describe the types of areas where you use this program: Truck mounted ULV sprayers are used in suburban residential neighborhoods with a relatively dense configuration of streets. A backpack mistblower is used in areas with high mosquito populations and/or in areas with an elevated disease risk.

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**
Anvil 10+10	1021-1688-8329	0.0024 lbs. per acre	truck mounted ULV sprayer	60.27 gallons
Mavrik Perimeter	2724-478	0.5 fl. oz./ 5 gals water per 1000 sq. ft.	backpack mistblower	32.59 ounces

Please describe the maximum amounts or frequency used in a particular time frame such as season and areas
The least amount of time that Anvil 10+10 was used in the same area was 6 days. Mavrik Perimeter wasn't used in the same area twice.

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 at least 200 mosquitoes found in a trap from one night)
Comments: _____

Please attach a map of your service area (or a website link to that map).
sudbury.ma.us/emmcp/

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: Ditch maintenance is done using either a LinkBelt 75 Spin Ace track mounted excavator or hand tools. When planning ditch maintenance activities, protocols are followed that are contained in the Massachusetts Best Management Practices and Guidance for Freshwater Mosquito Control.

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	2,402 feet

☒ Mechanized cleaning	1,412 feet
☐ 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? Most ditch maintenance activities are done between September and the end of March.

Comments: _____

Please attach a map of ditch maintenance areas (or a website link to that map). sudbury.ma.us/emmcp/

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: Pre-application larval surveys were conducted at 109 sites. Post-application surveys were conducted at 16 sites. ArcView GIS maps of targeted wetlands are prepared prior to the application and then converted for use for the helicopter's Ag-Nav system.

Ground ULV Adulticide: Pre-application adult mosquito surveys using CDC light traps are done to determine whether control is needed. Post-application surveys using CDC light traps are conducted to determine if additional ground ULV adulticiding is needed.

Larvicide – catch basins: Pre-application larval surveys using a Landers Ladle are done in June to determine the appropriate time to begin using Bacillus sphaericus. Random pre-application and post-application surveys using a Landers Ladle are undertaken during July, August and September to monitor Culex larval populations and determine the efficacy of Bacillus sphaericus applications. Random monitoring of paint marks on catch basins left by catch basin applicators is conducted to evaluate the coverage in neighborhoods where larvicide applications have been completed.

Larvicide-hand/small area Pre-application larval surveys are conducted prior to each application. Random post-application surveys are conducted to monitor efficacy.

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):
For aerial larval control, pre and post-application larval dip counts are undertaken with a minimum of 30 dips per site. In addition, the applicator is supplied with ArcView GIS maps of targeted wetlands that are used in the applicator's AgNav systems. The AgNav maps recorded during the application are reviewed following the application to evaluate the coverage of treated areas. At catch basins, sampling using a Landers Ladle is conducted during the early summer to determine when the presence of Culex larvae becomes common. Two samples using a Landers Ladle are taken at each sampled catch basin. Applicators are required to mark each catch basin with water soluble marking paint when larvicide is applied. Monitoring of paint marks left on catch basin grates is conducted to evaluate coverage. Random post application sampling is conducted to determine the efficacy of Bacillus sphaericus applications. For small area wetland larval control, applicators are required to find 3 larvae per 10 dips before a larvicide can be applied. Post-application surveys are carried out at random. Before adult mosquito control is scheduled, CO2 baited light traps are used to monitor mosquito populations in the neighborhood. A minimum of 200 mammal biting mosquitoes must be collected at a trap site before spraying will be scheduled in that neighborhood. The variation in the minimum trap collection size to justify spraying is related to the normal mosquito collections found at a site. Trap collections below the minimum number result in a determination that spraying does not need to be scheduled at that time.

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: The primary purposes are to measure populations of mammal biting species and populations of species considered enzootic or bridge vectors for West Nile virus and EEE. The data is used to evaluate the need for control. As funding is available, Culex species, Cs. melanura and other potential human bridge vector species are submitted to DPH for virus testing. The Project also used ovitraps to monitor for the presence of Aedes albopictus.

What months is this program active? May through October

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

Trap Type	**Canopy?** (check box for yes)	**Number of traps** (leave blank if zero)
☐ ABC light trap	☐	
☐ ABC light trap w/CO_2	☐	
☐ CDC light trap	☐	
☒ CDC light trap w/CO_2	☐	205
☒ Gravid trap		84
☐ Landing rate test		
☐ NJ light trap	☐	
☐ NJ light trap w/CO_2	☐	
☒ Ovitrap		6 trap sites, 2 traps per site/per week, 10 weeks
☐ Resting box		
☐ Other (please describe):		
☐ Other (please describe):		
☐ Other (please describe):		

Do you maintain long-term trap sites in any of your areas? Yes
If yes, how many:
There are 3 to 5 trap sites in most municipalities. In municipalities with significant wetland acreage, light trap sites are located in yards that are in close proximity to major mosquito habitats for spring and summer floodwater mosquitoes. In densely populated areas, gravid traps are placed in yards or municipal properties with the goal of providing geographic spacing within the community.

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*
☒ *Oc. abserratus*
☒ *Oc. canadensis*
☒ *Oc. cantator*
☐ Others (please list):

☒ *Oc. j. japonicus*
☒ *Oc. sollicitans*
☒ *Oc. taeniorhynchus*
☒ *Oc. triseriatus*
☒ *Oc. trivittatus*
☒ *Ps. ferox*
☐ *Ur. sapphirina*

Number of adult mosquitoes collected this season (whether submitted to DPH or not): 145,869
Number of adult mosquito pools collected this season (submitted and unsubmitted):
Number of ovitrap collections this season, if any: 120
Any other trap collections of note (please describe):

Do you participate in the MDPH Arboviral Surveillance program? Yes
Total number of adult mosquito pools submitted to DPH this past season: 319
How many pools do you submit weekly on average? 24.54

Number of traps in your service area **placed by MDPH**: 4
Were these long-term trap sites or supplemental trapping sites? long-term

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)	2		1
☒ West Nile Virus (WNV)	12		2
☐ Other (please list):			

Comments: _____

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, low	low, moderate, high, critical
WNV	low	low, moderate

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: The Project's public education program is designed to develop awareness within the public and private sectors as to their roles in mosquito control.

The Project serves as a resource to residents, municipal officials and the local media on controlling mosquitoes, larval mosquito habitats and mosquito borne diseases.

What time frame during the year is this method employed? It is an ongoing program that is active throughout the year.

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): Each person who allowed the Project to put a survey trap on their property in 2018 received a letter informing them of the results on their property and requesting that the Project be allowed to use their property for surveillance in 2019.)
☒ 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. Coordinate with municipal officials to post notices on City/ Town List Servers and City/Town websites to notify residents, municipal departments and local media of planned helicopter Bti larval control applications, the pesticide exclusion process and planned neighborhood truck mounted adult mosquito control activities.
2. Daily phone calls from residents.
3. Interviews with local media.

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 The Project shared administration with the Suffolk County Mosquito Control Project.
☒ Another state agency (DCR, DPH, etc.) The Project collaborated with DPH to monitor for Aedes albopictus by submitting mosquito eggs collected from ovitraps.
☐ Environmental groups
☐ Industry

List any training/education your staff received this year: Four employees attended the annual Northeastern Mosquito Control Association (NMCA) meeting. Two employees attended the

annual NMCA Field Day. Two employees attended a pesticide resistance workshop hosted by Northeast Regional Center for Excellence in Vector-Borne Diseases.

Please list the certifications and degrees held by your staff: Mike Bryant and Chris Gagnon are Certified Pesticide Applicators. Brian Farless, Cameron Kelley, Konrad Musialowski, Salvatore Restuccia, Peter Mirata are Licensed Pesticide Applicators. Jessica Gavin, Matt Restuccia, Daniel Serafini are Permitted Catch Basin Applicators. Chris Gagnon and Cameron Kelley have a 2A/1C Hoist Operator's License. David Henley has a B.B.A. in Management, Mike Bryant has an A.B. in Turf Management. Doug Bidlack has a Ph.D. in Entomology, an M.S. in Entomology and Plant Pathology and a B.S. in Biological Sciences. Chris Gagnon has a B.S. in Wildlife Biology. Brian Farless has a B.S. in Communications. Cam Kelley has a B.S. in Criminal Justice. Konrad Musialowski has a B.S. in Community Health. Matt Restuccia has a B.A. in Accounting and Business/Management.

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 enter your approved budgets for the current, previous, and future fiscal years.

	Date of Fiscal Year	**Approved Budget**	**Notes**
Previous	2019	760,720.81	
Current	2020	782,945.65	
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):

The following are the regular appropriations for FY 2020 from the cities and towns of the East Middlesex MCP: Arlington - $21,400, Bedford - $40,817, Belmont - $19,139, Brookline - $13,809.23, Burlington - $43,953, Cambridge - $51,046, Concord - $20,400, Everett - $20,000, Framingham - $56,311, Lexington - $28,590, Lincoln - $10,300, Malden - $21,063, Maynard - $13,000, Medford - $24,336, Melrose - $19,791, Newton - $45,362, North Reading - $49,500, Reading - $42,147, Sudbury - $51,066, Wakefield - $27,427, Waltham - $37,688, Watertown - $18,620, Wayland - $25,414.01, Wellesley - $20,913.41, Weston - $43,872 and Winchester - $16,981.

Comments: _____

SERVICE REQUESTS

How many service requests did you receive this season? 281
How many were for larviciding? 56
How many were for adulticiding? 126

Was this an increase or decrease over last season? Increase

Comments: The East Middlesex Mosquito Control Project will respond to residents who request that an adjacent or nearby wetland be checked for mosquito larvae, or to investigate obstructions in waterways. Decisions on adult mosquito spraying are based on mosquito and arbovirus surveillance data.

EXCLUSIONS

How many exclusion requests did you receive this season? 43

Was this an increase or decrease over last season? Increase

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

If yes, please explain, and attach maps or a web link if possible. Great Meadows National Wildlife Refuge and the Assabet River National Wildlife Refuge manage large tracts of wetland acreage in Bedford, Concord, Lincoln, Maynard, Sudbury and Wayland that they exclude from larval and adult mosquito control pesticide applications. They will only permit control, when the Refuge Manager determines that there is an imminent local risk from mosquito borne disease. The Sudbury Valley Trustees, a private land trust, that owns wetlands in Concord, Framingham, Sudbury and Wayland has excluded their property from larval and adult mosquito control pesticide applications.

Assabet River National Wildlife Refuge, topo map: www.farnwr.org/maps1.html
Great Meadows National Wildlife Refuge, map:
www.fws.gov/refuge/great_meadows/map.html
Sudbury Valley Trustees, trail maps: http://www.sudburyvalleytrustees.org/maps

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: The Project works with local DPW officials and Conservation Administrators to identify excess sedimentation and or debris that is obstructing waterways and culverts and to maintain those waterways and culverts. The Project coordinated catch basin larvicide applications with local public works departments so as not to conflict with catch basin cleaning.

- ☐ 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? Yes

If yes, please explain: Per the provisions of the Act, the Project excludes schools, group day care centers and school age child care programs from adult mosquito control pesticide applications unless the pre-requisites for spraying are fulfilled.

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: _____