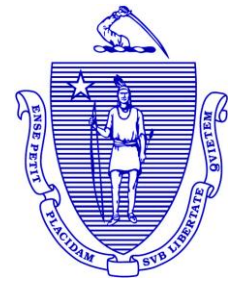


MASSACHUSETTS MOSQUITO CONTROL

ANNUAL OPERATIONS REPORT



Year Report Covers: 2017 Date of Report: 01/31/2018

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

Address: 11 Sun St.

City/Town: Waltham Zip: 02453

Phone: 781-899-5730 Fax: 781-647-4988

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Report prepared by: *Brian Farless*

NPDES permit no. **MAG87A041**

If you have a mission statement, please include it here: The Suffolk County Mosquito Control Commission (the Commission) represents the interests of Boston, Chelsea, and their residents in providing guidance and oversight to the Suffolk County Mosquito Control Project (the Project). The Commission strives to ensure that the member communities receive services that are consistent with applicable law 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. The Project's integrated mosquito management plan will consist of mosquito surveillance, larval mosquito control of wetlands and catchbasins, adult mosquito control, wetlands management/ ditch maintenance and public education.

ORGANIZATION SETUP:

Commissioner names:

Christopher Busch _____
Julien Farland _____
Kaitlyn Hennigan _____
Sam Lipson _____

Superintendent/Director name: Brian Farless, David Henley (retired)

Superintendent/Director contact phone number: 781-899-5730

Asst. Superintendent/Director name:

District/Project website: <http://scmcp.webs.com/>

Twitter handle: @BostonMosquito

Facebook page: <http://www.facebook.com/>

Staffing levels for the year of this report:

Full time: 3

Part time: 1

Seasonal: 4

Other: (please describe)

Of the above, how many are:

(Please check off all that apply, and list employee name(s) next to each category)

- Administrative David Henley, Brian Farless, Katherine Swan
- Biologist
- Educator
- Entomologist
- Facilities David Henley, Brian Farless
- Information technology
- Laboratory
- Operations Full time: Michael Radley, Brian Farless; Seasonal: Dylan Murphy, Kelly Palmer, Brendan Riske, Sean Wilson
- Public relations David Henley, Brian Farless
- 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)
- 5 Larval control equipment (list type) Solo Backpack Pump Sprayer
- 2 ULV sprayers (list type) 1 handheld sprayer, 1 Clarke Smartflow sprayer
- 4 Vehicles

Other (please be specific):

Comments: _____

How many cities and towns are in your service area?* 2

Alphabetical list: Boston, Chelsea

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 and summer floodwater species, salt marsh and brackish water species and Culex species. Spring floodwater species are controlled because they are aggressive mammal biting species that are active during the late spring and early summer, when residents are frequently involved in youth sports, recreation activities and outdoor maintenance projects. Summer floodwater species are controlled because they are aggressive mammal biting species and possible human vectors of EEE. Salt marsh mosquitoes are controlled because they bite during the day and are considered very aggressive mammal biting mosquitoes. Brackish water species are aggressive mammal biting species. Culex mosquitoes are controlled because they are considered enzootic and human vectors for West Nile virus.

The Project worked collaboratively with the Boston Public Health Commission to distribute larvicides for use in catch basins to control Culex mosquitoes to municipal departments and large Boston property managers including the Boston Housing Authority, the Franklin Park Zoo, Boston University, Harvard University and Tufts University.

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. Salt marsh mosquito larvae are controlled following full moon high tides from June through October. Culex mosquito larvae are controlled from June through September.

Describe the types of areas where you use this program: Intermittently flooded wetlands, salt marshes, 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
VectoBac G	73049-10	5 lbs. per acre	helicopter	Larvae	<input type="checkbox"/> Catch basins <input type="checkbox"/> Containers <input checked="" type="checkbox"/> Wetland <input type="checkbox"/> Other (please list):	220 lbs.
Vectobac 12 AS	275-102	8 oz. per acre; 16 oz. per acre	backpack pump sprayer	Larvae	<input type="checkbox"/> Catch basins <input type="checkbox"/> Containers <input checked="" type="checkbox"/> Wetland <input type="checkbox"/> Other (please list):	9.28 gals.
Vectolex WSP	73049-20	1 pouch per catch basin or similar water holding container	hand applied	Larvae	<input checked="" type="checkbox"/> Catch basins <input checked="" type="checkbox"/> Containers <input type="checkbox"/> Wetland <input type="checkbox"/> Other (please list):	451.57 lbs.
Altosid Pellets	2724-448	8 grams per catch basin	hand applied	Choose one	<input type="checkbox"/> Catch basins <input type="checkbox"/> Containers <input type="checkbox"/> Wetland <input type="checkbox"/> Other (please list):	88.03 lbs.
Altosid Pellets WSP	2724-448	1 pouch per catch basin	hand applied	Larvae	<input checked="" type="checkbox"/> Catch basins <input type="checkbox"/> Containers <input type="checkbox"/> Wetland <input type="checkbox"/> Other (please list):	203.72 lbs.
				Choose one	<input type="checkbox"/> Catch basins <input type="checkbox"/> Containers <input type="checkbox"/> Wetland <input type="checkbox"/> Other (please list):	
				Choose one	<input type="checkbox"/> Catch basins <input type="checkbox"/> Containers <input type="checkbox"/> Wetland <input type="checkbox"/> 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 Rate(s)	Application Method	Targeted life stage	Habitat Type	Total finished product applied
				Choose one	<input type="checkbox"/> Catch basins <input type="checkbox"/> Containers <input type="checkbox"/> Wetland <input type="checkbox"/> Other (please list):	
				Choose one	<input type="checkbox"/> Catch basins <input type="checkbox"/> Containers <input type="checkbox"/> Wetland <input type="checkbox"/> Other (please list):	
				Choose one	<input type="checkbox"/> Catch basins <input type="checkbox"/> Containers <input type="checkbox"/> Wetland <input type="checkbox"/> Other (please list):	
				Choose one	<input type="checkbox"/> Catch basins <input type="checkbox"/> Containers <input type="checkbox"/> Wetland <input type="checkbox"/> Other (please list):	
				Choose one	<input type="checkbox"/> Catch basins <input type="checkbox"/> Containers <input type="checkbox"/> Wetland <input type="checkbox"/> Other (please list):	
				Choose one	<input type="checkbox"/> Catch basins <input type="checkbox"/> Containers <input type="checkbox"/> Wetland <input type="checkbox"/> Other (please list):	
				Choose one	<input type="checkbox"/> Catch basins <input type="checkbox"/> Containers <input type="checkbox"/> Wetland <input type="checkbox"/> 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 the month of June as a pre-emergence treatment to control Culex larvae. Altosid Pellets, Altosid Pellets WSP, and Vectorex 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).
<http://scmcp.webs.com/>

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, EEE human bridge vector mosquitoes and secondary WNV human bridge vector species.

What is the time frame for this program? Truck mounted ULV sprayers are used at suburban residential neighborhoods with a relatively dense configuration of streets. A backpack mistblower is used when needed in thick vegetation that surrounds a wetland.

Describe the types of areas where you use this program: June through September

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	4.2 gals.

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

In 2017, two neighborhoods were each sprayed 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 100-200 mammal biting mosquitoes)

Comments: Scheduling adult mosquito control applications is based on mosquito population data. Spraying in the vicinity of an EEE or West Nile virus isolation or human case may be done. Citizen requests for control are regarded as supplemental data that may influence the shape of the area where control is scheduled.

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: Vacant lots and open space areas are checked for discarded, rimless tires. When found, tires are taken to a tire recycling center. In 2017, there were 360 tires that were collected and taken to a recycling facility.

What time frame during the year is this method employed? Year round, but mostly in late fall, winter and early spring.

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 hand tools and the East Middlesex Mosquito Control Project's LinkBelt 75 track mounted excavator to remove obstructions and restore water flow. The planning process for using an excavator involves following protocols contained in the Massachusetts Best Management Practice 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)
<input type="checkbox"/> Culvert cleaning	
<input checked="" type="checkbox"/> Hand cleaning	800 ft.

<input type="checkbox"/> Mechanized cleaning	
<input type="checkbox"/> Stream flow improvement	
<input type="checkbox"/> Other (please list):	

Comments: _____

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

Maintenance Type	Estimate of cumulative length of ditches maintained (ft)
<input type="checkbox"/> Hand cleaning	
<input type="checkbox"/> Mechanized cleaning	
<input type="checkbox"/> Other (please list):	

Comments: _____

What time frame during the year is this method employed? Most freshwater ditch maintenance is done October through April.

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: Pre-application surveys were conducted at 2 sites. Considering the data, aerial application occurred at one site and post-application surveys were conducted at 1 site. Arcview GIS maps of targeted wetlands are prepared prior to the application. Ag-Nav maps recorded during the application are reviewed to determine coverage.

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

Larvicide – catch basins: Pre-application larval surveys are done in June to determine the appropriate time to begin using Bacillus sphaericus products. Random pre-application and post-application larval surveys are undertaken during July, August and September. Random monitoring of paint marks on catch basins left by applicators is conducted to evaluate coverage of treated areas.

Larvicide-hand/small area Pre-application surveys are conducted prior to all applications. Random post-application surveys are conducted.

Open Marsh Water Management:

Source Reduction: Inspections of open space areas and vacant lots are done to monitor for the presence of discarded tires.

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-application larval dip counts are undertaken with a minimum of 30 dips per site. Random post application dip counts with a minimum of 30 dips at sites where monitoring occurs. 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 a larvicide was applied. Monitoring of paint marks left on catch basin grates by applicators 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 do a minimum of 10 dips and find a minimum of 3 larvae 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 100 to 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 in that neighborhood or re-scheduled if the neighborhood has recently been sprayed.

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 near facilities engaged in interstate commerce to monitor for the presence of Aedes albopictus.

What months is this program active? May through October

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

- | | |
|---|---------------------------------|
| <input type="checkbox"/> ABC light traps | <input type="checkbox"/> Canopy |
| <input type="checkbox"/> ABC light traps w/CO ₂ | <input type="checkbox"/> Canopy |
| <input type="checkbox"/> CDC light traps | <input type="checkbox"/> Canopy |
| <input checked="" type="checkbox"/> CDC light traps w/CO ₂ | <input type="checkbox"/> Canopy |
| <input checked="" type="checkbox"/> Gravid traps | |
| <input type="checkbox"/> Landing rate tests | |
| <input type="checkbox"/> NJ light traps | <input type="checkbox"/> Canopy |
| <input type="checkbox"/> NJ light traps w/CO ₂ | <input type="checkbox"/> Canopy |
| <input checked="" type="checkbox"/> Ovitrap | |
| <input type="checkbox"/> Resting boxes | |
| <input type="checkbox"/> Other (please describe): | |

Do you maintain long-term trap sites in any of your areas? Yes

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

Light trap sites are located in close proximity to major mosquito habitats for spring and summer floodwater mosquitoes and Cq. perturbans. Light traps are also used near large salt marsh areas to monitor primarily brackish water species and to determine the presence of Oc. sollicitans and Oc. taeniorhynchus. Gravid trap sites are placed with the goal of providing geographic spacing within Boston and Chelsea.

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

- | | |
|--|---|
| <input checked="" type="checkbox"/> <i>Ae. albopictus</i> | <input checked="" type="checkbox"/> <i>Cx. pipiens</i> |
| <input checked="" type="checkbox"/> <i>Ae. cinereus</i> | <input checked="" type="checkbox"/> <i>Cx. restuans</i> |
| <input checked="" type="checkbox"/> <i>Ae. vexans</i> | <input checked="" type="checkbox"/> <i>Cx. salinarius</i> |
| <input checked="" type="checkbox"/> <i>An. punctipennis</i> | <input checked="" type="checkbox"/> <i>Cs. melanura</i> |
| <input checked="" type="checkbox"/> <i>An. quadrimaculatus</i> | <input checked="" type="checkbox"/> <i>Cs. morsitans</i> |
| <input checked="" type="checkbox"/> <i>Cq. perturbans</i> | <input checked="" type="checkbox"/> <i>Oc. abserratus</i> |

Oc. canadensis

Oc. cantator

Oc. j. japonicus

Oc. sollicitans

Oc. taeniorhynchus

Other (please list):

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? 8

Number of traps in your service area **placed by MDPH**: 35

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
<input type="checkbox"/> Eastern Equine Encephalitis (EEE)			
<input checked="" type="checkbox"/> West Nile Virus (WNV)	25		
<input type="checkbox"/> Other (please list):			

Comments: 24 WNV positive pools submitted by SCMCP and 1 positive pool submitted by MDPH.

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: _____

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, mosquito borne diseases and mosquito management pesticides.

What time frame during the year is this method employed? 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):)
- 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): Public notification is coordinated through the Boston Public Health Commission prior to helicopter applications of Bti to wetland areas to control mosquito larvae and prior to neighborhood truck mounted aerosol applications of Anvil 10 + 10 to control adult mosquitoes.

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 the Boston Public Health Commission (BPHC) to notify residents, interested groups, City departments and the media of planned helicopter Bti larval control applications and neighborhood truck mounted aerosol applications of Anvil to control adult mosquitoes. Provided mosquito larvae and information to the BPHC outreach coordinator, who staffed a table at local events.
2. Had an education table at Science in the Park in Chelsea. Discussed mosquitoes with school aged kids and their parents and teachers.
3. Posted outreach material on Twitter (@BostonMosquito).

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 worked co-operatively with the East Middlesex Mosquito Control Project. The cooperation included shared administration, training on adult mosquito surveillance, mechanical repair of sprayers, helicopter larval control and outreach efforts. The two Projects collaborated on a paper on catch basin larval surveillance and control that was presented at the annual meeting of the American Mosquito Control Association.
- Another state agency (DCR, DPH, etc.) The Project collaborated with DPH to monitor for Aedes albopictus by submitting mosquito eggs collected in ovitraps.
- Environmental groups Notices about planned wide area adult mosquito spraying were sent to the Boston Beekeepers Association.
- Industry

List any training/education your staff received this year: Three employees attended the Northeastern Mosquito Control Association meeting. One employee attended the NMCA Field Day workshop. One employee attended the American Mosquito Control Association annual

meeting. One employee attended a Mosquito Surveillance and Control Workshop sponsored by the Centers for Disease and Control, the American Mosquito Control Association and Rutgers. One employee attended an Aedes albopictus workshop hosted by Bristol County Mosquito Control. Two employees attended a pesticide industry sponsored workshop discussing pesticides and proper mosquito control methods. One employee completed PACE training on Excel, Preventing Workplace Violence, Preventing Sexual Harassment in the Workplace, training on Domestic Violence, Sexual Assault and Stalking Awareness, a training on Conflict of Interest and a training on Diversity (Disability Awareness).

Please list the certifications and degrees held by your staff: David Henley is a Certified Pesticide Applicator. Brian Farless, Michael Radley and Brendan Riske are Licensed Pesticide Applicators. Kelly Palmer, Dylan Murphy and Sean Wilson are Permitted Catchbasin Applicators. David Henley has a B.B.A. in Management. Brian Farless has a B.S. in Communication. Michael Radley has a B.S. in Resource Economics. Kelly Palmer has a B.S. in Biology. Brendan Riske has a B.A. in Global Studies. Sean Wilson has a B.S. in Environmental Protection and Policy.

Comments: David Henley was awarded the 2017 MEHA Mentor Award at the annual conference of the Mass. Environmental Health Association.

INFORMATION TECHNOLOGY (IT)

Does your program use (check all that apply):

- Aerial Photography
- Databases
- Dataloggers (monitoring for temperature, etc.)
- GIS mapping (Describe: Create maps using ESRI ArcGIS software for media purposes, in-house use and for the helicopter company that handles our aerial applications)
- 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
2017	265,264

2018	273,221
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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):

Boston - \$262,632; Chelsea - \$10,589

Comments: _____

SERVICE REQUESTS

How many service requests did you receive this season? 11

How many were for larviciding? 1

How many were for adulticiding? 10

Was this an increase or decrease over last season? Decrease

Comments: The Suffolk County 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. A citizen request for adult mosquito spraying is considered supplemental information, which may influence the shape of the area where wide area spraying has been planned based on mosquito and arbovirus surveillance.

EXCLUSIONS

How many exclusion requests did you receive this season? 6

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. Massachusetts Audubon, Boston Nature Center and Wildlife Sanctuary

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 coordinated catch basin applications with the Boston and Chelsea Public Works Department catch basin cleaning programs.

- 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? Choose one

If yes, please list any corrective actions here: _____

GENERAL COMMENTS

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