

## **THE AMERICAN MOSQUITO CONTROL ASSOCIATION'S NEW PESP 5-YEAR 2010 STRATEGY DOCUMENT**

**INTRODUCTION:** The American Mosquito Control Association (AMCA) has participated in the EPA'S Pesticide Environmental Stewardship Program (PESP) since 1996. Over the years, we have received numerous accolades and awards from the EPA as a result of our stewardship activities, and we currently are listed as a Gold Tier PESP Member. The AMCA is a non-profit umbrella organization which provides information and guidance to thousands of mosquito workers and hundreds of mosquito management agencies throughout the United States, Canada and Latin America. The AMCA has no authority over any of these individuals or institutions, and any cooperation with the AMCA or acceptance of its guidelines is voluntary. Only agencies and regional associations within the United States who also financially support the AMCA are eligible to participate in our PESP activities as an Individual or Regional PESP Partner under the AMCA's auspices. To participate, these institutions must submit a background document which characterizes their environmental stewardship philosophies, state their willingness to join our efforts, and consent to participate in our AMCA PESP activities. They also must provide a representative who will become a voting member of the PESP Subcommittee, which is a division of the AMCA's Legislative and Regulatory Committee. The PESP Subcommittee reviews partnership applications and then forwards them to the AMCA Board of Directors for approval.

This new 5-year 2010 PESP Strategy Document was developed by the AMCA's PESP Subcommittee and approved by the AMCA Board of Directors. Beginning in year 2010, we plan to document our environmental stewardship activities in 4 areas: Source Reduction & Working with Managers of Public Lands, Worker Education, Mosquito & Disease Surveillance, and Public Outreach. We will continue to use our on-line reporting system, and incorporate a Microsoft Excel spreadsheet capable of tallying entries for each cell for all participants. Documenting the great variety of mosquito management activities throughout the United States requires both many data fields to capture the efforts and the ability for individual reporting agencies to skip non-applicable entries. In addition, since the AMCA's PESP Partners do not represent all mosquito control workers throughout the country, our reports will only document a sample of the total annual mosquito management effort in the US. PESP Activity details are presented below.

Following established AMCA procedures, annual PESP Activity Reports will be prepared by the AMCA PESP Subcommittee and then approved by the AMCA Board of Directors before they are submitted to the EPA. The AMCA requests that the EPA indulge them when this practice results in submission dates that vary from the EPA's timetable for submissions.

**ACTIVITY 1: SOURCE REDUCTION & WORKING WITH MANAGERS OF PUBLIC LANDS.** The AMCA will work with managers of public lands to implement focused and environmentally sound intervention strategies to control mosquitoes as needed. As part of our Integrated Mosquito Management (IMM) approach, these activities will typically include appropriate source reduction, sanitation, and the use of biopesticides to control mosquitoes early in their life cycle. In some cases, highly focused applications of adulticides directed at specific airborne mosquito populations may be required. These IMM strategies will prevent mosquitoes from developing and dispersing from public lands. The overriding goal will be to reduce the risk

of disease transmission by intervening at critical points in the mosquito life cycle, while preserving and protecting our environment. Participants will submit Activity 1 data as follows:

**RULE:** Skip data entries for measures or sub-measures that are not applicable to your organization.

**Measure 1:** Identify and list non-drainage source reduction/sanitation efforts that were conducted to prevent mosquito breeding

**Sub-measure a:** List the number of residential inspections where containers were dumped to prevent mosquito production.

**Sub-measure b:** List the number of tree-holes in your area of responsibility that were filled to prevent mosquito production.

**RULE:** You only have to do this once. All future reports will incorporate this information for your agency or region and will change only when you change the total.

**Measure 2:** Identify and list the number of drainage source reduction projects in your area that are actively reducing mosquito breeding and therefore any risks that would have been associated with pesticide applications.

**RULE:** This measure may include a tally of historical projects that are still functioning.

**RULE:** You may include sites where the project fails to prevent mosquito production under extraordinary circumstances

**RULE:** You only have to do this once. All future reports will incorporate this information for your agency or region and will change only when you report changes.

**Sub-measure a)** List the number of linear feet (if applicable and known) of the project

**RULE:** Use GIS where possible to determine the linear feet of ditches.

**Sub-measure b)** List the acres that are being impacted by the project.

**RULE:** If the project is contained within a clearly defined area, assume that the project's impact is for the entire area, even though the actual impacted area may be different. For example, if you have a project within a 5000 acre park, the default area impacted is 5000 acres. If you choose to calculate a different impact area, you must be able to clearly define the boundaries of the impacted area and state your criteria. The use of a GIS mapping program would be helpful in these situations. The web form will have an extra cell where the variance criteria may be stated. For example, the project is in a 5000 acre park that is adjacent to a community occupying an area of 6000 acres. The project controls mosquitoes in both. Therefore the project area may be reported as 11000 acres. Use the extra cell assigned for explanations to provide any additional supporting text.

**Measure 3:** Identify and list the names and numbers of municipalities, agencies, agricultural land owners, ETC., that are performing Best Management Practices (BMP's) to reduce mosquito development.

**RULE:** List these by category. We will have a place on the form to distinguish between each type. Please add missing categories so that we can add them to the form.

**RULE:** You will need to identify the changes in irrigation or other water management practices on agricultural lands, municipal sewage processing plants, and food packing plants, etc in order to qualify a BMP land owner. A comments section will be provided on the web report form.

**RULE:** You may incorporate nuisance as well as vector mosquito management

**RULE:** You may include municipalities that perform ditch and or basin maintenance as part of an ongoing BMP Project, and those who modify their floodwater detention/retention area holding practices to prevent mosquito production.

**RULE:** You only have to do this once. All future reports will incorporate this information for your agency or region and will change only when you report changes.

**Measure 4:** Identify additional non-numerical efforts (e.g. special publications, meetings, web sites, legislation, etc.) whose purpose is to promote cooperative management agreements between mosquito agencies and others. For example, the Florida Coordinating Council on Mosquito Control meets periodically to iron out differences between mosquito agencies and other government bodies.

**ACTIVITY 2: TRAINING MOSQUITO CONTROL WORKERS.** The AMCA believes that the best way to reduce pesticide risk is to continuously educate mosquito control workers on proper pesticide use and safety techniques. Numerous states have educational programs which lead to certifying workers as proficient in "Public Health Pest Control" (or similar title). The AMCA strongly encourages implementing and enhancing such education/certification programs. Participants will submit Activity 2 data as follows:

**RULE -** Skip data entries for measures and sub-measures that are not applicable to your organization.

**RULE -** Data entries are for a calendar year.

**RULE -** You may include total for agencies that report to your organization. For example, the Florida Mosquito Control Association is a Regional PESP Partner, and will submit aggregate data for many Florida mosquito agencies that are not Individual PESP Partners under the AMCA's auspices. The four Florida Individual Partners will submit their data independently.

**RULE -** You may include totals for agencies that you provide services to. For example, a county mosquito management agency may provide training, support and/or pesticide applications for one or more cities in their area.

**Measure 1 -** List the number of mosquito workers in your organization that received mosquito control training.

**Measure 2 -** List the type of training received.

**RULE -** One individual may be represented in more than one sub-measure.

**Sub-measure a:** List the number of workers attending recertification (regional) training

**Sub-measure b:** List the number of workers attending annual state mosquito control conferences.

**Sub-measure c:** List the number of workers attending annual regional mosquito control conferences.

**Sub-measure d:** List the number of workers attending pertinent college courses.

**Sub-measure e:** List the number of workers attending other special training.

**Sub-measure f:** Discuss in the space provide, any other information regarding worker training.

**Measure 3** - List the number of "certified workers" in your organization.

**RULE** - You may include the number of certified workers in agencies that report to your organization. For example, the State of Florida is a Regional PESP Partner, and will submit aggregated data for many agencies in the state that each has Certified Workers. The total for the State of Florida will include all Certified Workers that are not listed for Beach Pasco; Anastasia & Indian River MCD's which should list their certified workers separately because they are Individual Partners under the AMCA's auspices. The object is to provide a comprehensive total with no overlap in reported numbers

**Measure 4** - List the number of "newly certified workers" in your organization.

**Measure 5** - List the number of "certified workers" outside of your organization that are operating within the jurisdictional boundaries of your organization. For example, if you are a statewide PESP Partner, list the number of certified applicators (if available) that are practicing mosquito control in your state that are not part of your state's umbrella mosquito control association.

**ACTIVITY 3: MOSQUITO & DISEASE SURVEILLANCE.** Important strides in reducing pesticide risk are achieved through careful surveillance for mosquitoes & mosquito-transmitted pathogens of public health significance, e.g., the viruses that cause St. Louis Encephalitis, West Nile Encephalitis, Eastern Equine Encephalomyelitis, and Western Equine Encephalomyelitis. Documenting the presence of mosquito populations before applying pesticides may result in a lower pesticide application frequency. If a pathogen is discovered through surveillance, appropriate actions can be taken which may include more carefully directed pesticide applications. Participants will submit Activity 3 data as follows:

**RULE** - Skip data entries for measures that are not applicable to your organization.

**RULE** – The base time unit for Activity 3 measures and sub-measures is one calendar week

**Measure 1** - List the number of weeks during the calendar year in which you sprayed at least once for adult mosquitoes.

**RULE** - An adult spray week occurs when at least mosquito adulticiding occurs in during any part of a calendar week. For example, XYZ sprayed for adult mosquitoes using various combinations of equipment and at different times during each of 12 weeks of the calendar year. XYZ's total is 12.

**Measure 2** - List the number of weeks during the calendar year in which you surveyed for adult mosquitoes in your area by using traps and/or landing rate counts.

**RULE** - An adult trapping week occurs when at least one adult mosquito trap is placed in operation for any part of a calendar week. For example, XYZ ran 44 CDC traps each day, from dusk to dawn, during 30 calendar weeks of the year. XYZ's total is 30.

**RULE** - A landing count weeks occurs when at least one count is taken during a calendar week. For example, XYZ conducted landing rate counts, day and night, at 50 stations during 30 weeks of the year. XYZ's total is 30.

**Measure 3** - List the number of weeks during the calendar year in which you sprayed at least once for mosquito larvae/pupae.

**RULE** - A larvae/pupae spray week is countable when at least one larvicide application occurs in during any part of a calendar week. For example, XYZ sprayed for mosquito larvae and pupae using various combinations of equipment and at different times during each of 12 weeks of the calendar year. XYZ's total is 12.

**Measure 4** - List the number of weeks during the calendar year in which you surveyed at least once for larvae and pupae in your area.

**RULE** - A larvae/pupae survey week is countable when at least one field inspection for larvae/pupae occurs in during any part of a calendar week... For example, XYZ conducted field inspections for larvae and pupae on one or more days during 30 calendar weeks of the year. XYZ's total is 30.

**Measure 5** - List the number of weeks during a calendar year when sentinels were used for disease surveillance in your area.

**RULE** - A sentinel week occurs when at least one sentinel site is operated for any part of a calendar week. For example, XYZ operated 10 sentinel sites containing 6 animals each during 30 weeks of the year. XYZ's total is 30.

**Measure 6** - List the number of weeks that disease was found in sentinels in your area during the calendar year.

**RULE** - Count the number of weeks when sites were positive and not the number of sites or animals at a site that had positive results. For example, XYZ operated sentinel sites which were sampled once per week for 30 weeks. On 4 of those weeks, various numbers of sites and sentinels were positive for arbovirus. XYZ's total is 4.

**Measure 7** - List the number of weeks during a calendar year when dead birds were used for disease surveillance in your area.

**RULE** - A dead bird week is a calendar week.

**RULE** - A dead bird week occurs when at least one dead bird is collected during any part of a calendar week. For example, XYZ found a total of 24 dead birds over a 6 week period during the calendar year. XYZ's total is 6.

**Measure 8** - List the number of weeks that disease was found in dead birds collected in your area during the calendar year.

**RULE** - Count the number of weeks when collected dead birds were positive. For example, XYZ found 24 dead birds over a 6-week period, and 13 of them during two of the calendar weeks were positive for arbovirus. XYZ's total is 2.

**Measure 9** - List the number of weeks during a calendar year when mosquito pools were used for disease surveillance in your area.

**RULE** - A mosquito pool week occurs when at least one collection is submitted during any part of a calendar week. For example, XYZ submitted one mosquito pool for each of its 44 CDC traps during each of the 30 weeks that it trapped adult mosquitoes during the calendar year. XYZ's total is 30.

**Measure 10** - List the number of weeks that disease was found in mosquito pools from your area during the calendar year.

**RULE** - Count the number of weeks when at least one mosquito pool collected during that week was positive. For example, XYZ found a total of 31 positive mosquito pools during 5 calendar weeks and the rest of the time pools were negative. XYZ's total is 5.

**ACTIVITY 4: PUBLIC OUTREACH.** The AMCA believes that important strides in reducing pesticide risk related to mosquito management activities are achieved through public education, and strongly encourages the development and continuation of public outreach programs. As the public becomes better informed about mosquitoes and how individuals can help prevent them, pesticide use is reduced and associated pesticide risk reduction is achieved. Participants will submit Activity 4 data as follows:

**RULE:** Skip data entries for measures or sub-measures that are not applicable to your organization.

**RULE** - Data entries are for a calendar year.

**RULE** - The EPA may provide PESP brochures to be used as handouts. You are not restricted to using only them if they are made available

**Measure 1** - List the number of school/community meetings that your organization participated in where integrated mosquito management, environmental stewardship and/or the PESP was discussed.

**Measure 2-** List the number of flyers/bulletins/notes discussing integrated mosquito management, environmental stewardship and/or the PESP that were distributed at school/community meetings that your organization participated in.

**Measure 3** - List the number of flyers/bulletins/notes inserted into utility and/or tax bills where integrated mosquito management, environmental stewardship and/or the PESP was discussed.

**Measure 4** - List the number of flyers/door-hangars left at residences where integrated mosquito management, environmental stewardship and/or the PESP was discussed.

**Measure 5** - List the number of web sites represented by your organization where integrated mosquito management, environmental stewardship and/or the PESP was discussed.

**RULE** - The EPA must approve web site content where their PESP logo will be displayed. Contact the PESP Subcommittee Chairman or the EPA for details.

**Measure 6** - List the number of press releases/media briefings (TV, radio, newspapers, etc) where integrated mosquito management, environmental stewardship and/or the PESP was discussed.

**Measure 7** - List the number of regional and state mosquito control meetings where integrated mosquito management, environmental stewardship and/or the PESP was discussed.

**Measure 8** - List the number of meetings held with politicians or their aides where integrated mosquito management, environmental stewardship and/or the PESP was discussed.