



Maryland Department of the Environment

Overview for 2018 MD/DC Utilities Association Environmental Conference

(10/2/18)

**General Permit Renewal For Discharges FROM
THE APPLICATION OF PESTICIDES (17PE)
(NPDES MDG87)**





Discussion Today

- Background
- Defining 'Desirable Species'
- Process for Determining Potential Impact to 'Desirable Species'
- Determining Size Thresholds
- Signage
- Copper Limits
- Drinking Water Restrictions



History of MDE Pesticide Permits

Maryland regulations under COMAR 26.08.03.02, provide for certain restrictions for **“Use of Toxic Substances for Aquatic Life Management Purposes”**.

This regulation requires that any person who adds toxic substances to the Waters of this State for aquatic life management purposes shall be governed by certain restrictions.

The Department thus issues a state permit, referred to as a **TMP**, which based on an application, results in a permit a few pages long. The Department has acted on it since at least 1972, or over 40 years in Maryland.

Requires Joint Application, to MDE and DNR.



Last 5 Years of TMPs

1,879 TMPs issued.

124,572 acres treated.

Type of Coverage	Number of Permits	Percentage	Acres	Percentage
Type 1 – Mosquito, Black Fly or Midge*	61	3.4%	106,918.0	84%
Type 2 – Weed, Algae and Pathogen Control	1714	97.9%	17,652.0	16%
Type 3 – Nuisance Animal Control	4	0.002%	2.7	0%
Type 4 – Forest Canopy Pest Control	0	0.0%	0.0	0%
* Some TMPs contain both Type 1 and Type 2.				



NPDES Permits for Pesticides

In 2006, EPA issued a final rule (hereinafter called the “**2006 NPDES Pesticides Rule**”) effective on January 26, 2007.

On January 7, 2009, the Sixth Circuit vacated EPA’s **2006 NPDES Pesticides Rule** under a plain language reading of the CWA. *National Cotton Council of America v. EPA*, 553 F.3d 927 (6th Cir., 2009). The Court held that the CWA unambiguously includes “biological pesticides” and “chemical pesticides” with residuals within its definition of “pollutant.”

As a result, since 2011 NPDES permits are required for discharges to waters of the United States of

- biological pesticides, and
- chemical pesticides that leave a residue.



NPDES for Pesticide Application

In 2011:

- EPA issued the “PGP” NPDES Pesticide General Permit, effective for many states and
- Maryland issued the “11PE” NPDES Pesticide General Permit. This in addition to the existing TMPs.

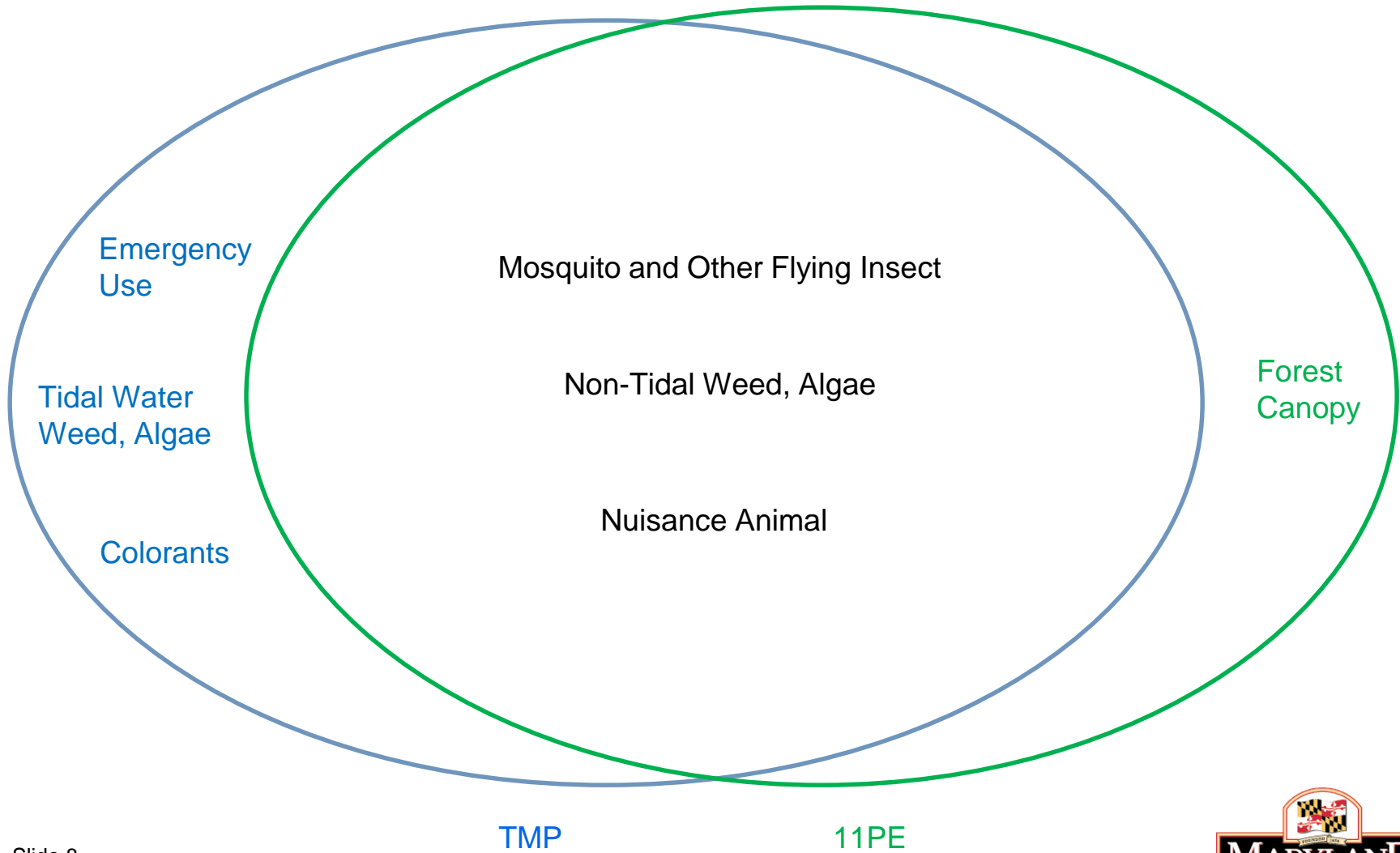


No Permit Required for:

- Pesticides applied to terrestrial agricultural crops where runoff from the crop, either as irrigation return flow, or agricultural stormwater, discharges to State Waters.
- Spray drift resulting from pesticide applications (Non-Point Source Discharges)



Comparison of TMP to 11PE



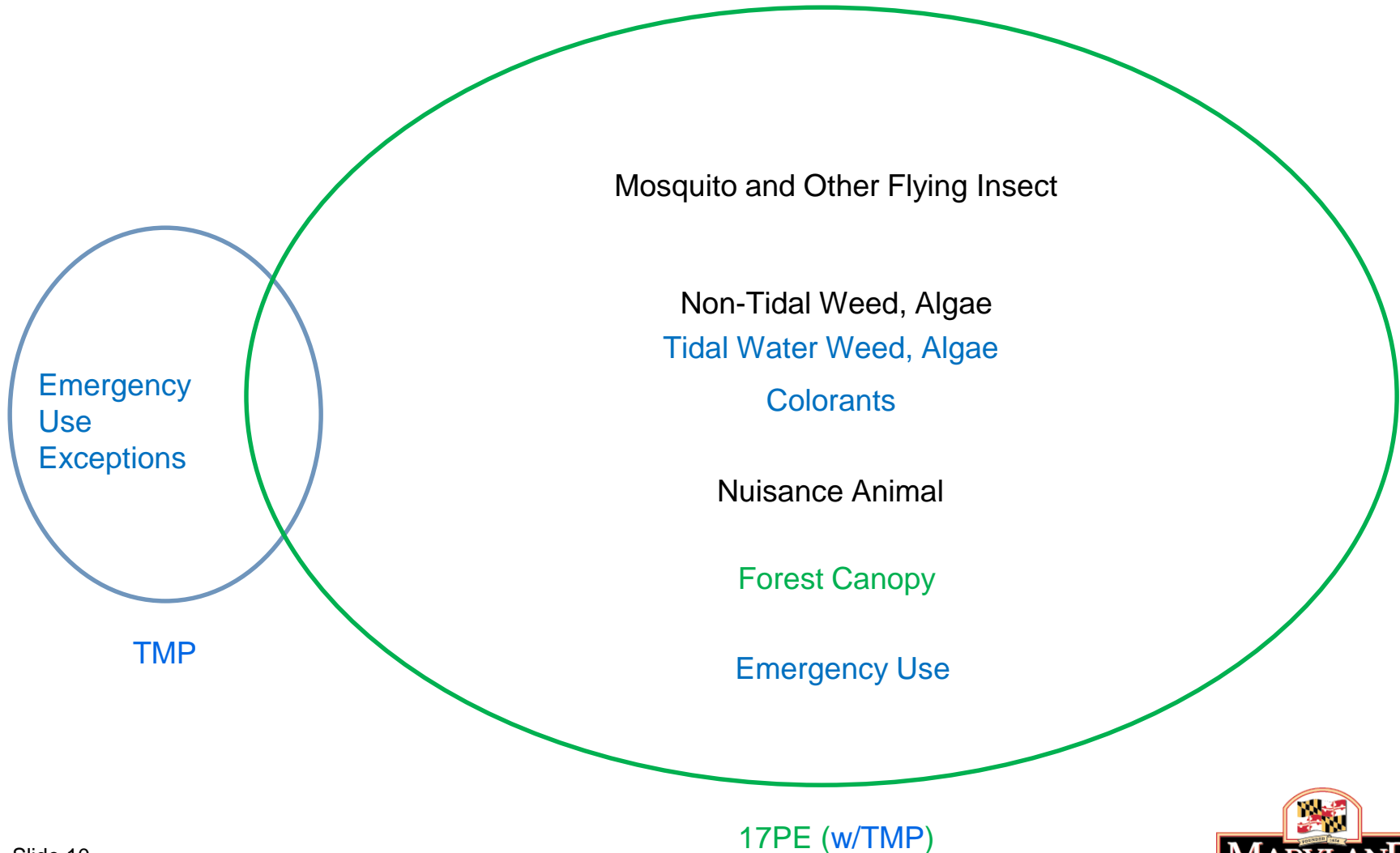


Recent Activity

- In February 2018, a change was proposed to our regulations:
 - To allow incorporation of TMP requirements into the General Discharge permit.
 - The change became final and effective April 23rd, 2018.
- During the 11-PE renewal, we will incorporate the TMP requirements into the NPDES permit to create the 17-PE.



17 PE – Eligible Discharges





Key Clarification

- A single permit covers pesticide applications.
- Coverage based on a Notice of Intent (NOI), and a separate TMP is Not Required.
- The general permit includes colorants (dyes), and tidal weed treatment.
- The forest canopy requires an NOI.



Restrictions of the permit..

- Endangered Species Act (ESA) restrictions (desirable species)
- Impaired water restrictions
- Tier 3 restrictions (currently n/a to Maryland)



Desirable Species

- TMPs regulation required protections for Desirable Species.



Tools to ID Desirable Species

- DNR's website for the SSPRA program (nongame species), tools on MDE's website for Use III waters (brook trout protection), and standard maps (i.e. Google Maps) for locations that discharge to the Potomac or Susquehanna.
- Atlantic Sturgeon protection area includes the Potomac River to Great Falls (north of DC), and the Susquehanna up to the Conowingo Dam.



- Cold water native trout species are protected in water designated as [Use III](#).
- SSPRA program maintains a map on [Merlin](#), under drop down list of "Living Resources" of "sensitive species".





FIFRA Assumptions

- The 17PE permit relies on MDA to train and certify applicators.
- The 17PE permit relies on pesticide use according to and consistent with the EPA registered label.

Applicators must “Achieve and maintain the required Pesticide Applicator Certification and Business Licensing Requirements from Maryland Department of Agriculture.”





Impaired Water Restrictions

Any discharges from a pesticide application to Waters of this State is prohibited if the water is identified as impaired by a substance in that pesticide or a degradate of such an active ingredient. The existing impairments:

- Chlordane (no longer sold in MD)
- Heptachlor Epoxide (no longer sold in MD)
- Copper (area near Sparrows Point)



Application Background

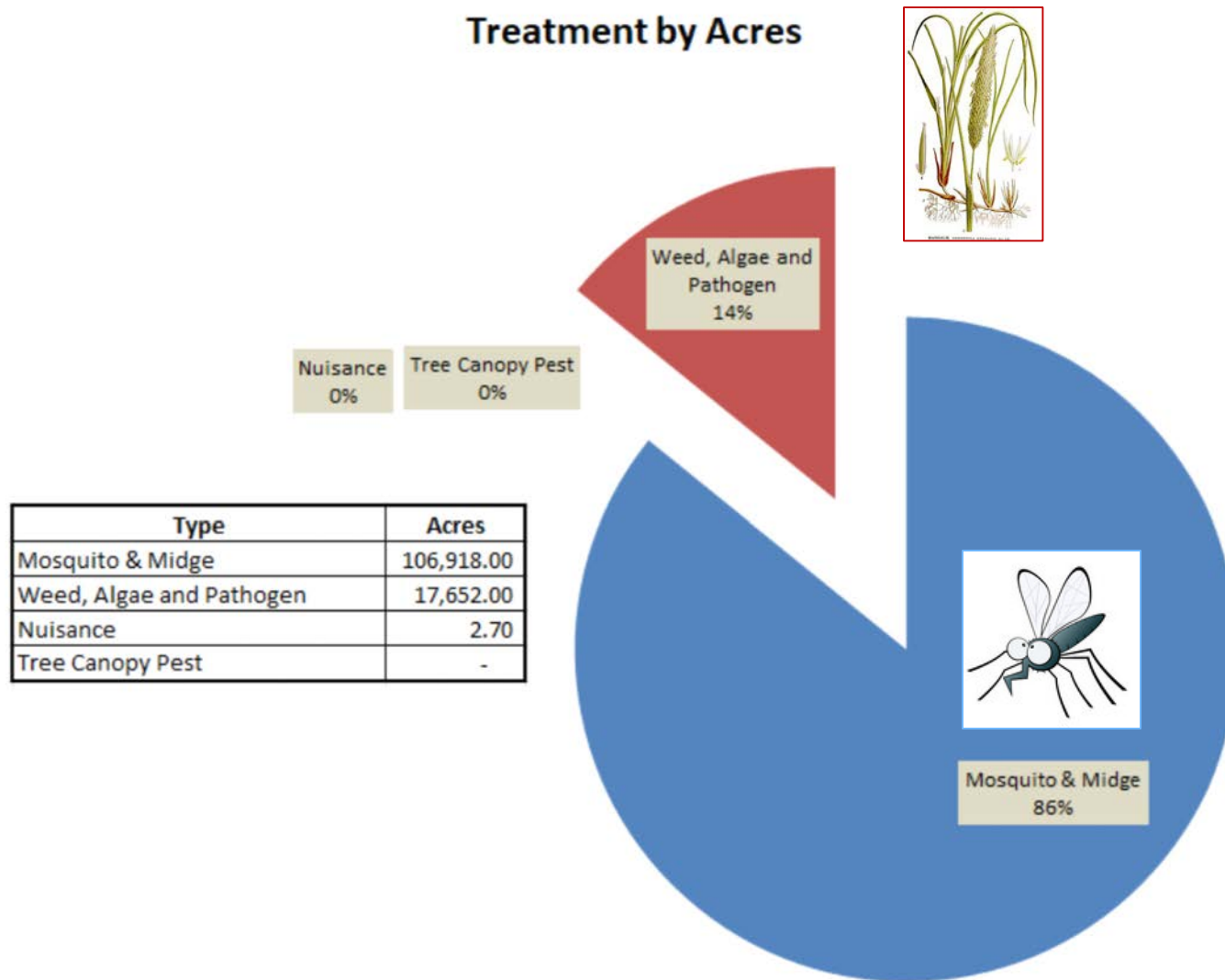
TMP data size and use evaluation.





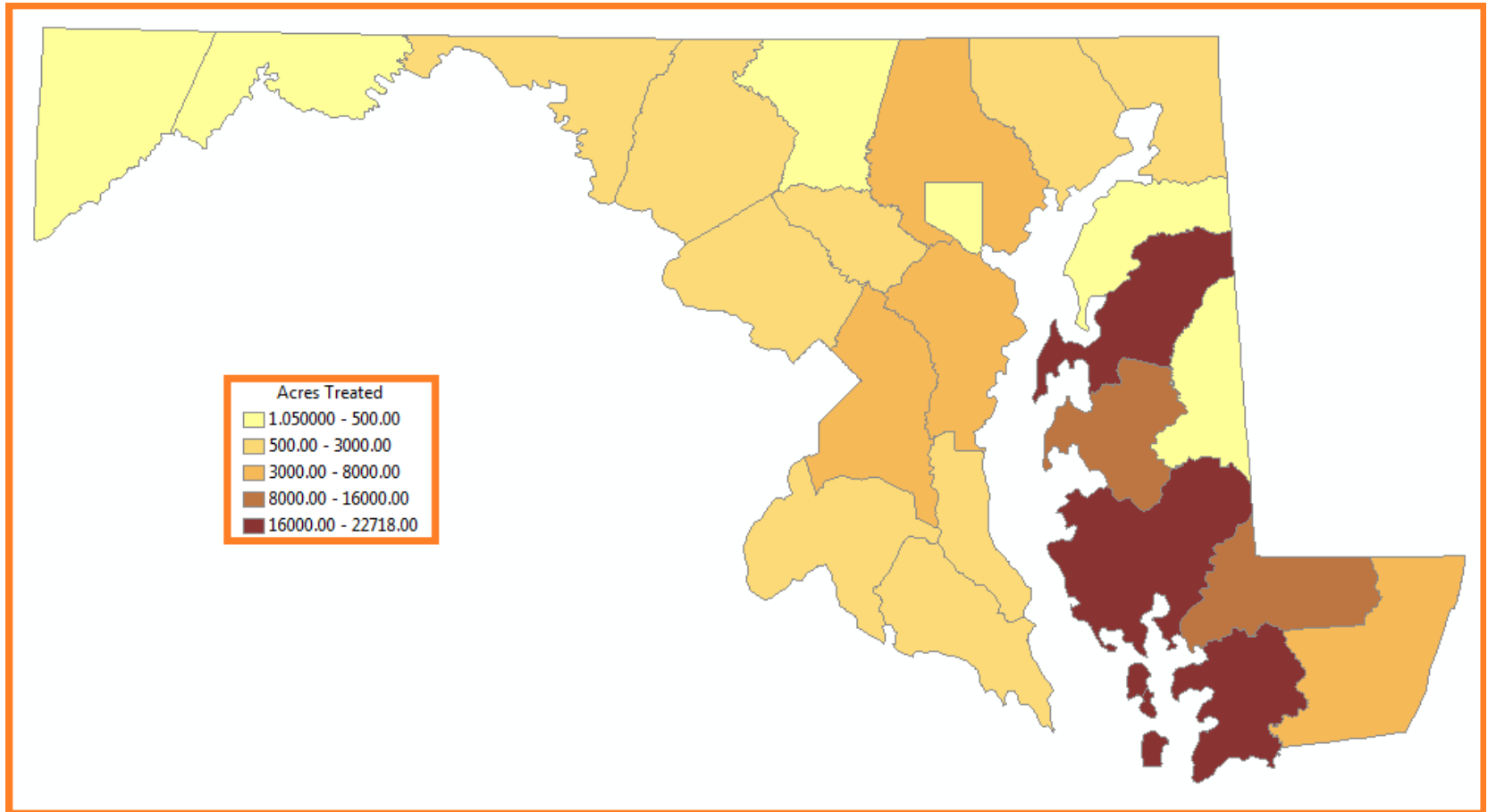
TMPs Categories by Acres Treated

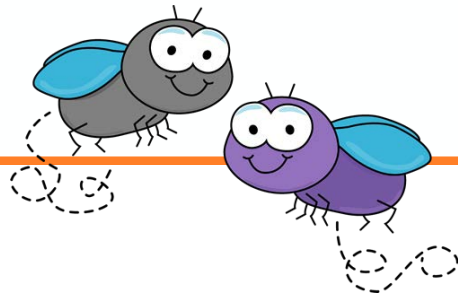
Treatment by Acres





Total Acres Treated Permitted by TMPs

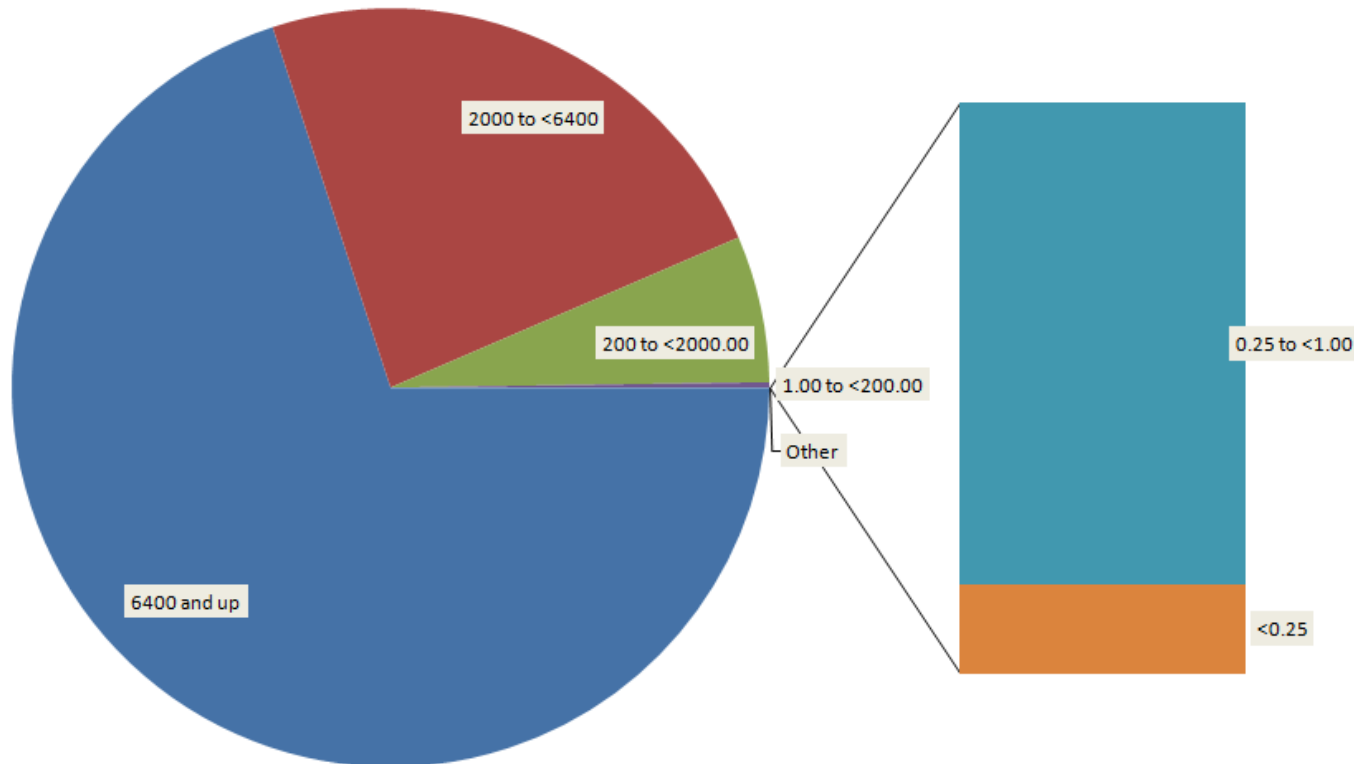






Mosquito, Midge and Black Fly Control Grouped by Acres Treated

Total Acreage per Operator (Type 1)



Acre Grouping	Total Acreage	Percentage
6400 and up	74,795.00	69.96%
2000 to <6400	25,199.00	23.57%
200 to <2000.00	6,676.00	6.24%
1.00 to <200.00	242.95	0.23%
0.25 to <1.00	4.62	0.00%
<0.25	0.85	0.00%

Over 99%
acreage
treatment is
over 1 acre





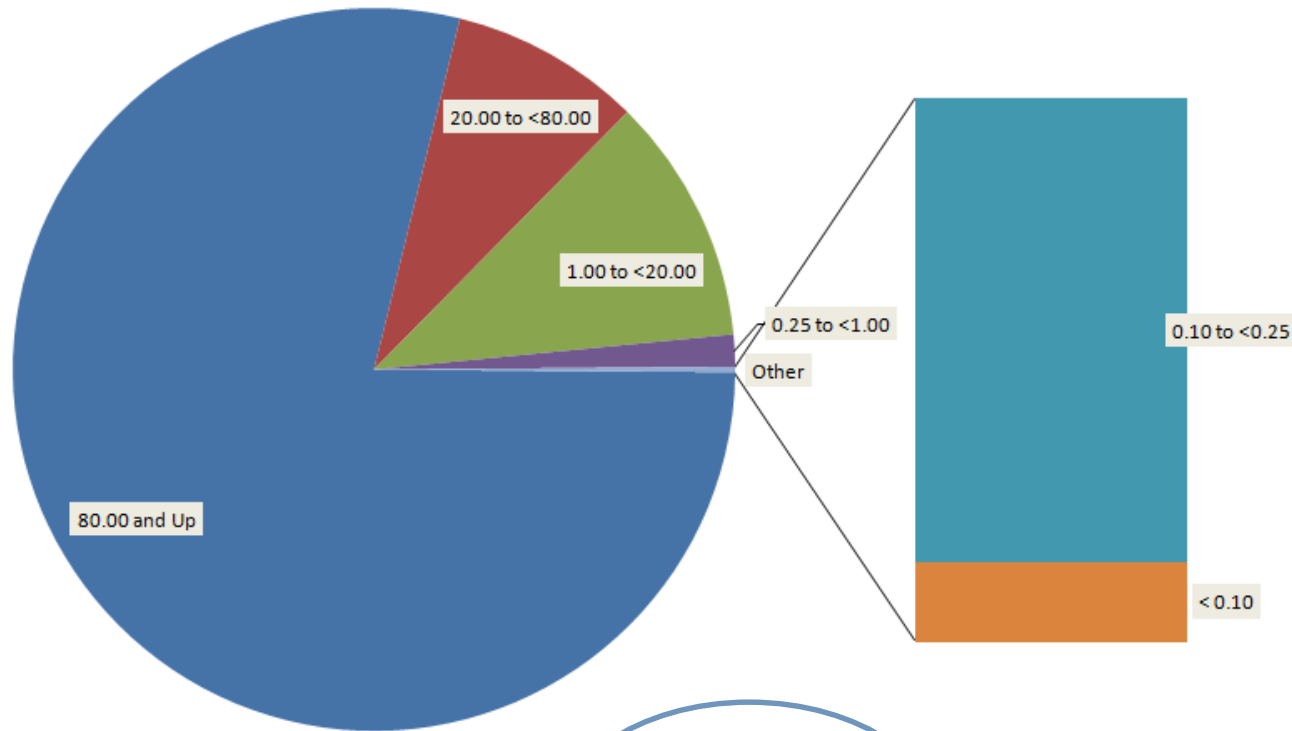
Number of TMPs issued for Weed, Algae and Pathogen Control





Weed, Algae and Pathogen Control TMPs Grouped by Acres Treated

Total Acreage per Operator (Type 2)



Acreage Grouping	Total Acreage	Percentage
80.00 and Up	13,893.50	78.71%
20.00 to <80.00	1,510.57	8.56%
1.00 to <20.00	1,953.11	11.06%
0.25 to <1.00	252.85	1.43%
0.10 to <0.25	36.20	0.21%
< 0.10	6.13	0.03%

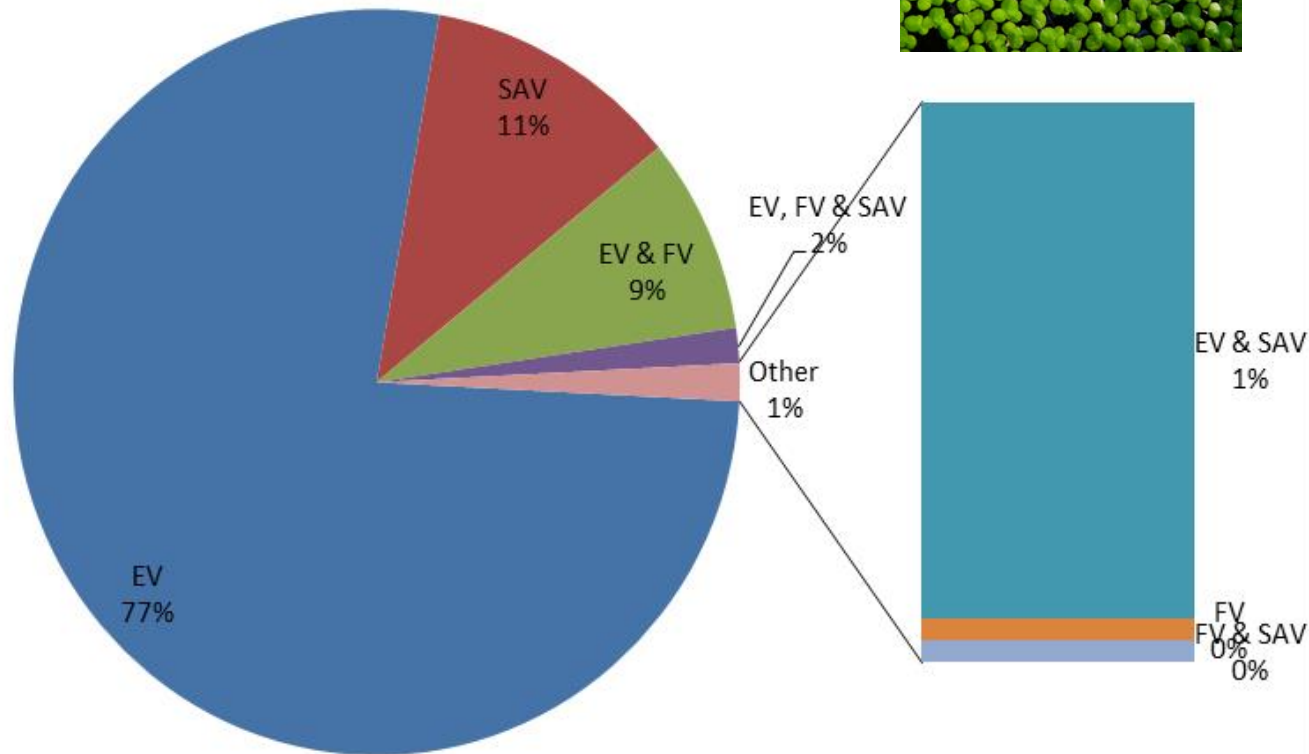
Over 96% of projects are for treatment over 1 Acre





Weed, Algae and Pathogen

Total Acres



EV – Emergent Vegetation
FV – Floating Vegetation
SAV – Submerged Aquatic Vegetation



Who submits Application (NOI)?

Decision-Makers - any entity with control over the decision to perform pesticide applications including the ability to modify those decisions that result in a discharge to Waters of this State.



Applicator is still covered by the permit, but doesn't require a second application.





When does Decision-Maker File NOI?

When there is a “Desirable Species” in the application area or an application to Tier 3 waters; OR

Permittee will determine based on web tools

Any agency that has pest control as an integral part of the organization’s operations or responsibilities; OR

When application area exceeds thresholds of:

Type 1 – Mosquito or Flying Insect

✓1 Acre Larvicide?

✓6400 Acres Adulticide?


Type 2 – Weed & Algae – 1 Acre?

Type 3 – Aquatic Creature – 1 Acre?

Type 4 – Forrest Canopy – 6400 Acres?



NOI vs TMP application (new)

- Will include the use pattern.
- Must be signed by a signatory.
- Must include evaluation of Desirable Species, Tier 3, Impairments.  Permittee will determine based on web tools
- Will only go to MDE, and then when required to DNR. (although DNR consultation ahead of time will speed process)



DNR Consultation

Fast Lane:

If applicant consults with DNR first, then DNR can provide a letter that can be attached to the NOI, for quicker processing by MDE.

Less Fast Lane:

If consultation **didn't** happen prior to submitting NOI, MDE would work with DNR to determine any restrictions, much like we do today.



TMP Requirements

- Washing and Cleaning Limitations
 - Prohibits discharges of cleaning to either Waters of this State or to a WWTP.
- Dead fish or plants must be removed.
- Buffer Management Plan must be followed.
- Colorant use restrictions.



Pesticide Discharge Management Plan

- Only required by those who need to submit an NOI.
- Since the thresholds vary from the 11-PE, more Plans will need to be developed.
- Contents are the same, however a template is now provided for those wanting to make use of it.
- Now it is specific to the Decision-Maker making and maintaining the plan.





Notice Requirements

COMAR has signage requirements for pesticide applications:



–pesticides used for ornamental or turf management in cemeteries, golf courses, parks, and similar sites

FIFRA Label also may require signage.



Public Information

The applicator must carry information for the public and present it upon request during the time the pesticide is being applied. This printed or written information is to include: 1) Name and EPA ID of the pesticide applied; 2) Date applied; 3) Name of licensee/permittee; 4) Telephone number of licensee/permittee.



Proposed Copper Requirements



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Drinking Water



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Applicable Recordkeeping and Annual Reporting Requirements

17-PE Part	Applicable Type of Operator
F.1	Recordkeeping For All Operators
F.2	Recordkeeping for All Operators who are For-Hire Applicators
F.3	Recordkeeping for Any Decision-maker Required to Submit an NOI and Who is a Small Entity ⁽¹⁾
F.4	Recordkeeping for Any Decision-maker Required to Submit an NOI and Who is a Large Entity ⁽²⁾
F.5	Retention of Records for All Operators
F.6	Annual Reporting for Any Decision-maker Required to Submit an NOI and Who is a Large Entity ⁽²⁾
F.7	Annual Reporting for Any Decision-maker with Discharges to waters of the United States containing a Desirable Species, as defined in Appendix A, and Who is a Small Entity ⁽¹⁾





Additions from PGP

- Appendix for
 - Pesticide Discharge Evaluation (small business)
 - Adverse Reporting form,
 - Annual Reporting form,
 - Desirable Species Procedures