



## City of Annapolis

### Department of Neighborhood & Environmental Programs

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## City of Annapolis Integrated Pest Management policy

The City, in carrying out its operations, must occasionally deal with the management of pests and weeds on City property. As a water town, the quality of that water has taken on high importance amongst residents and visitors. The threat pesticides pose to our waterways has been confirmed by the United States Geological Survey, which has identified many pesticides that have been found in waterways and groundwater supplies across the United States<sup>1</sup>. Research published in journals such as the *American Journal of Epidemiology*<sup>2</sup> and *Estuaries*<sup>3</sup> further confirm the dangers of pesticides. The practices employed by the City of Annapolis on public property can be altered to reduce the government's contribution to residual pesticides in our waterways by adopting a policy of Integrated Pest Management (IPM).

All pest management options are available under IPM, including pesticide use; however, the emphasis is placed on effective and environmentally sensitive approaches. Pesticides should only be used as a last resort. The IPM approach takes into consideration the level of damage caused by the pest, the pest life cycle, and the most economical and least hazardous treatment method to people, property, and the environment.

As a part of an overall IPM policy, any weed and pest management conducted on and around City property shall prioritize pest prevention and available non-pesticide alternatives. City departments shall follow the Integrated Pest Management and Natural Landcare approach outlined below. The Department of Neighborhood & Environmental Programs (DNEP) will provide program monitoring, technical assistance, and education as needed.

### IPM approach

1. Assess damage caused by the pest, and determine if the amount of damage caused is acceptable or warrants that further management actions must be taken;
2. Monitor each target pest to determine population, size, occurrence, and natural enemy population, if present. Identify decisions and practices that could affect pest populations. Keep records of such monitoring;
3. Consider and evaluate a range of treatment alternatives for the pest or weed problem. Employ non-pesticide management methods and tactics first, followed by the use of least-toxic pesticides (such as citrus oil-based weed killers) second, and the use of traditional pesticides only as a last resort or in the case of an emergency situation. Keep records of any treatment. Treatment alternatives to be considered are as follows:
  - a. Determine the most effective pest prevention strategy, based on pest biology and other variables, such as weather and local conditions,

<sup>1</sup> Pesticide National Synthesis Project, [water.usgs.gov/nawqa/pnsp/](http://water.usgs.gov/nawqa/pnsp/)

<sup>2</sup> [www.beyondpesticides.org/dailynewsblog/index.php?s=journal+of+epidemiology](http://www.beyondpesticides.org/dailynewsblog/index.php?s=journal+of+epidemiology)

<sup>3</sup> Effects of Dimilin on the Blue Crab, *Callinectes sapidus*, in Shallow-Water Habitats, Steve Rebach and Donald P. French, *Estuaries*, Vol.19, No. 2, Part A

- b. Design and construct indoor and outdoor areas to reduce and eliminate pest habitats, and utilize vegetation well-suited to our climate that require little management.
  - c. Modify management practices, including watering, mulching, waste management, food storage, and attractant elimination,
  - d. Use physical controls such as hand-weeding, traps and barriers,
  - e. Use biological controls (introducing or enhancing pests' natural enemies);
  - f. Implement natural landcare practices: establishing proper soil ph; planting pest-resistant grass varieties; aeration, dethatching, organic topdressing; phosphorus-free natural, slow-release fertilizer; overseeding; use of compost, microbial food sources and microbial inoculants; proper watering methods and mowing at 3".
4. Conduct ongoing educational programs:
- a. Acquaint staff with pest biology, the IPM approach, new pest and land care management strategies as they become known, and toxicology of least-toxic pesticides proposed for use as a last resort. *Educational assistance will be provided by DNEP.*
  - b. Inform the public of the City's attempt to eliminate pesticide use.

#### Department/contractor requirements

1. Follow the IPM approach as outlined above.
2. Keep records of the following items
  - a. Pest monitoring history (population, damage caused, possible causes/contributing factors)
  - b. Treatment history (*already required under state pesticide applicator laws*)
    - i. what methods were used when and in what quantity
    - ii. what staff/company were involved
    - iii. what alternatives were considered and why was the particular method chosen
  - c. Properly notify the public if/when any pesticides will be applied (*already required under state pesticide applicator laws*)
3. If pesticides are utilized, they must be applied under the supervision of a *certified pesticide applicator* per the Maryland Department of Agriculture (MDA) guidelines. According to the MDA, "Each agency performing pest control must obtain a public agency permit and have at least one individual certified in the categories in which it is making pesticide applications." The appropriate categories are *Right-Of-Way and Weed and Ornamental & Turf*.

For further information or assistance, please contact Maria Broadbent with the Department of Neighborhood & Environmental Programs, at (410)263-7946.