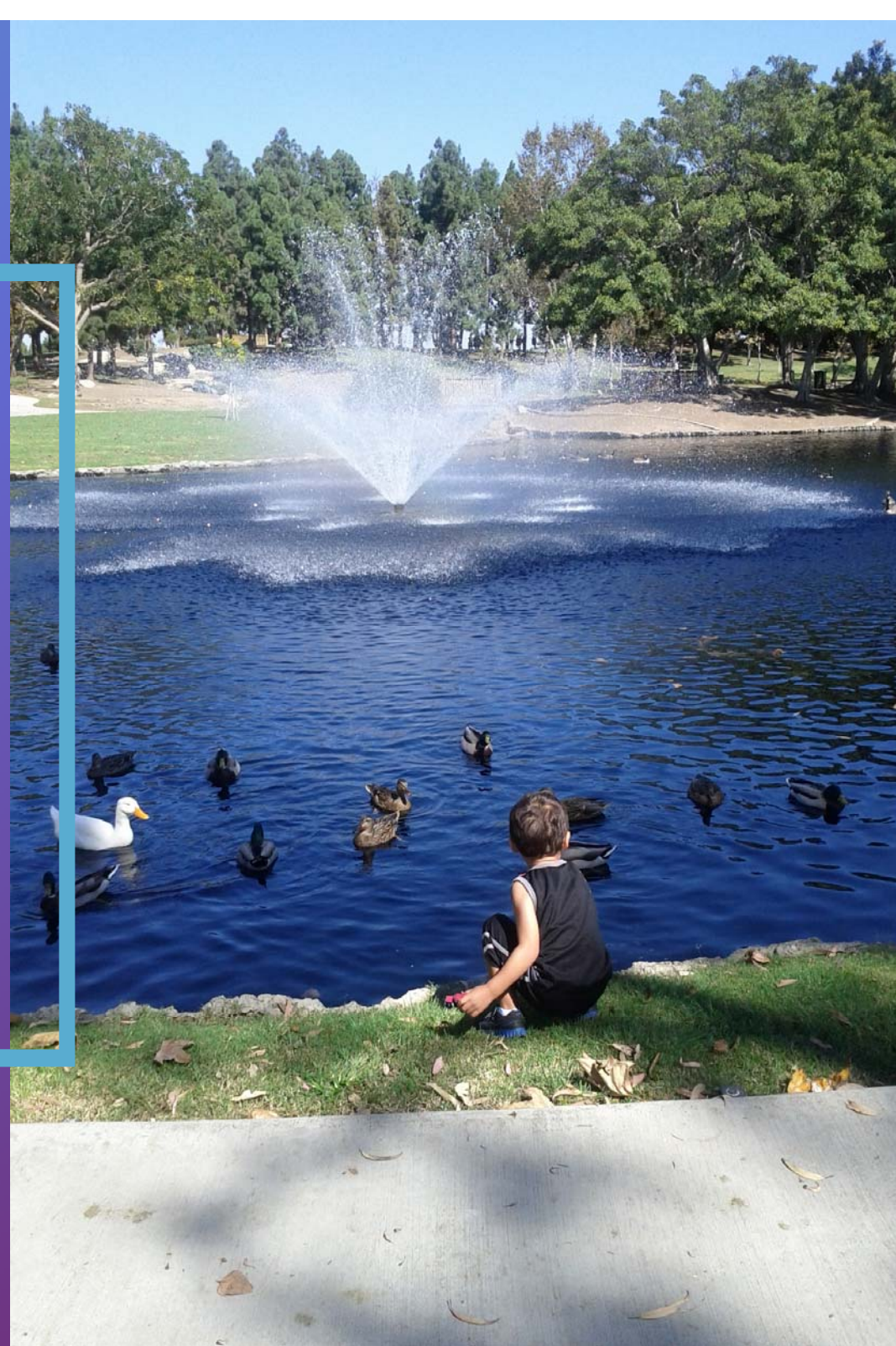


# City's Integrated Pest Management (IPM) Plan & Practices

City Council Study Session  
March 13, 2018



# Introduction

- The purpose of this report is to present the City's pest management practices and obtain feedback from the City Council.
- The report provides an overview of how the City's practices have evolved into an Integrated Pest Management (IPM) plan
- The IPM Plan guides the City's use of least harmful pest and weed management control strategies.



# Maintenance Responsibilities

- Over 181 acres of Passive Parks
- 37 acres of Sports Fields
- Over 450 linear miles of sidewalks curbs and gutters
- Over 800,000 square feet of landscaped medians and parkways
- 12 City facilities



# Citywide Pest Management Guiding Principles

- Emphasis on the use of Organic materials
- Limit exposure where children and the public congregate
- Increased focus on cultural practices
- Overall reduction of the use of pesticides
- Continued evaluation of the program as new technologies in methodology and organic materials evolve



# Integrated Pest Management (IPM)

- The IPM plan was developed with an ecosystem-based strategy that focuses on long term prevention of pests
- The IPM plan establishes clear criteria for acceptable circumstances in which using an organic or low-level pesticide is prioritized.
- The IPM plan presents a balanced approach between proper cultural practices, preventative practices, and the use of pesticides.
- The IPM plan exceeds standards and regulations set forth by federal, State and County agencies.



# IPM Plan Comparison

- **City of San Clemente**
  - Completed a twenty-one (21) day study on the use of glyphosate versus organic pesticide.



Figure 1. Day 0 kikuyugrass plots



Figure 4. Day 21 kikuyugrass plot



# Conclusion

- The Public Services Department formalized its current maintenance practices into an IPM Plan.
- The Plan prioritizes the incorporation of organic materials and best cultural practices.
- The Plan is flexible to allow for the continued incorporation of new materials and evolving technology.
- In comparison to practices and plans in other agencies, the City's Plan attempts to achieve an *effective balanced approach with minimal fiscal impact.*





**CITY'S INTEGRATED PEST  
MANAGEMENT (IPM) PLAN &  
PRACTICES**

**CITY COUNCIL STUDY SESSION**

**MARCH 13, 2018**



# Public Works Department Maintenance Operations Policies and Procedures

## **INTEGRATED PEST MANAGEMENT PROGRAM**

**PURPOSE:** To establish criteria for an Integrated Pest Management (IPM) Program.

**POLICY:** The City of Cost Mesa will focus on long-term prevention or suppression of pest problems with minimum impact on human health, the environment, and nontarget organisms with the limited use of pesticides in accordance with direction provided by the City Council for Parks, Fields and Playgrounds; City-wide Pest Management Guiding Principles, and an annual update:

### Parks, Fields and Playgrounds

When pesticides are needed, use the following prioritized approach: (1) organic pesticides; (2) Water Quality Act Allowed Pesticides; and (3) EPA Level III "caution" labeled pesticides only when deemed necessary to protect public health and economic impact by a licensed pest control adviser.

### Landscape Maintenance IPM Guidelines

- a. All pesticides used are reviewed by a licensed Pest Control Advisor and a written recommendation is provided prior to the use of any conventional or organic pesticide.
- b. Use of organic pesticides in all City properties, when pesticides are needed.
- c. Limit exposure to any pesticides where children and the general public congregate.
- d. Incorporate additional guidance on use of pesticides for city rights of way, facilities, and other properties as reflected in the staff report.
- e. Use EPA Level pesticides in a targeted manner, and only if deemed necessary to protect public health and economic loss by a licensed pest control advisor and City staff, when pests cannot be managed by other methods that we would have.

### Annual Update

Staff will return to the City Council annually with an update.

## PROCEDURES:

### Prevention

1. Public Works Staff shall review all new development and rehabilitation projects plans to verify compatibility with the site's environment.

### Monitoring

1. The Maintenance Divisions shall hire a consultant or contractor to provide regular monitoring services for all of the City's properties.
2. The consultant or contractor shall determine if pest populations are increasing, decreasing, or staying the same and to determine when to use a control tactic.
3. The consultant or contractor shall provide monthly monitoring records which include information such as date of examination, pests found, size and extent of the infestation, location of the infestation, control options utilized, effectiveness of the control options, labor and material costs.

### Non Chemical Control Measures

1. The Landscape Division shall utilize cultural controls which are modifications of normal plant care activities that reduce or prevent pests. In addition to those methods used in the pest preventions, other cultural control methods include adjusting the frequency and amount of irrigation, fertilization, and mowing height.
2. The Maintenance Divisions shall utilize mechanical control tactics involve the use of manual labor and machinery to reduce or eliminate pest problems using methods such as handpicking, physical barriers, or machinery to reduce pest abundance indirectly.
3. The Maintenance Divisions shall utilize the use of environmental manipulations that indirectly control or prevent pests by altering temperature, light, and humidity can be effective in controlling pests. Although in outdoor situations these tactics are difficult to use for most

pests, they can be effective in controlling birds and mammals if their habitat can be modified such that they do not choose to live or roost in the area.

4. The Maintenance Divisions shall utilize a biological control practice which uses living organisms to reduce pest populations. These organisms are often also referred to as beneficials, natural enemies or biocontrols. They act to keep pest populations low enough to prevent significant economic damage. Biocontrols include pathogens, parasites, predators, competitive species, and antagonistic organisms. Beneficial organisms can occur naturally or can be purchased and released. The most common organisms used for biological control in landscapes are predators, parasites, pathogens and herbivores.

#### Pesticide Controls

Pesticides are to be utilized in a prioritized approach on City properties as follows:

##### Parks, Fields and Playgrounds

When pesticides are needed, use the following prioritized approach: (1) organic pesticides; (2) Water Quality Act Allowed Pesticides; and (3) EPA Level III "caution" labeled pesticides only when deemed necessary to protect public health and economic impact by a licensed pest control adviser.

##### Rights of Way (Street medians/parkways) – Prioritized Use of Pesticides:

- a. Use organic pesticides first, when pesticides are needed.
- b. Use Clean Water Act allowed pesticides.
- c. EPA Level III "caution" label pesticide only if deemed necessary to protect public health and economic impact by a licensed pest control advisor and City staff.
- d. EPA Level II "warning" label pesticides, only if deemed necessary to protect public health and economic loss by a licensed pest control advisor and City staff, when other methods do not adequately control the pest.
- e. EPA Level I "danger" label pesticides, only if deemed necessary to protect public health and economic loss by a licensed pest control advisor and City staff, when other methods do not adequately control the pest.

Facilities/Buildings – Prioritized Use of Pesticides:

- a. Use organic pesticides first, when pesticides are needed.
- b. Use Clean Water Act allowed pesticides.
- c. Bait formulations of insecticides will be used where appropriate.
- d. EPA Level III “caution” label pesticide only if deemed necessary to protect public health and economic impact by a licensed pest control advisor and City staff.
- e. EPA Level II “warning” label pesticides, only if deemed necessary to protect public health and economic loss by a licensed pest control advisor and City staff, when other methods do not adequately control the pest.
- f. EPA Level I “danger” label pesticides, only if deemed necessary to protect public health and economic loss by a licensed pest control advisor and City staff, when other methods do not adequately control the pest.

Other City Properties – Prioritized Use of Pesticides:

- a. Use organic pesticides first, when pesticides are needed.
- b. Use Clean Water Act allowed pesticides
- c. EPA Level III “caution” label pesticide only if deemed necessary to protect public health and economic impact by a licensed pest control advisor and City staff.
- d. EPA Level II “warning” label pesticides, only if deemed necessary to protect public health and economic loss by a licensed pest control advisor and City staff, when other methods do not adequately control the pest.
- e. EPA Level I “danger” label pesticides, only if deemed necessary to protect public health and economic loss by a licensed pest control advisor and City staff, when other methods do not adequately control the pest. Pesticides should only be used when other methods fail to provide adequate control of pests and just before pest populations cause an unacceptable damage, since the overuse of pesticides can cause beneficial organisms to be killed and pest resistance to develop.

Approvals and Application of Chemical Pesticides

1. Pesticides shall be approved by the Maintenance Division Superintendents for their area of oversight prior to use. A written recommendation of proposed pesticide, including commercial name,

concentrations, allocation rates, usage and reentry time shall be prepared by a licensed California Pest Control Advisor and site specific schedule submitted for approval. No work shall begin until written approval of use is obtained and a notice of intent has been filed with the County Agricultural Commissioner's office, as required. Copies of Safety Data Sheets and specimen labels shall be given to the City prior to pesticide use on City property.

2. Chemicals shall only be applied by those persons possessing a valid California Qualified Applicator license/certificate. Application shall be in strict accordance with all governing regulations. Records of all operations shall be kept per California Department of Pesticide Regulations.
3. Pesticides shall be applied in a manner to avoid contamination of non-target areas. Precautionary measures shall be employed to keep the public from entering the spray zone until it is safe.
4. Posting of signs shall be required at all park facilities when any application of pesticides is performed.

Specific requirements for posting are as follows:

- Post signs at all park entrances at least 48 hours prior to spraying applications. The vendor's contact information, chemical name and application date must be listed.
- Place spray notices inside plastic page protectors. Attach them to a four-foot (4') high wooden stake. Signs must be readable 25' away from posted area.
- Leave the same signs up for 72 hours after the spraying applications are completed, then remove promptly.
- A temporary mesh fence such as orange plastic construction fencing can be erected on the perimeter of any area that is to be treated with a broadcast type application with the intent to keep people and pets off the treated area for a period of 24 hours.

### Records and Reporting

Records of all pesticides used by the Contractor on City property shall be retained in accordance with Department of Pesticide Regulations. Maintenance Superintendents will keep records of all pesticide usage and provide an annual report to the Director of Public Works reflecting the pesticide usage each year. The Public Works Department will provide an annual report to the City Council.