Legislation Text

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TO:
Honorable Mayor and Members of the City Council

THROUGH:
Bruce Moe, City Manager

FROM:
Stephanie Katsouleas, Public Works Director
Veronica Rodriguez, Maintenance Manager

SUBJECT:
Receive Report on City of Manhattan Beach Pesticide Management Practices, Consider Recommendations by the Sustainability Task Force, and Provide Direction (Public Works Director Katsouleas).

a) RECEIVE REPORT
b) DISCUSS AND PROVIDE DIRECTION

RECOMMENDATION:
Staff recommends that City Council receive this report regarding the pesticide management practices used by the City of Manhattan Beach, consider the recommendations made by the Sustainability Task Force regarding future pesticide product use, and provide direction to City staff.

FISCAL IMPLICATIONS:
There is no fiscal impact with receiving this report. However, should City Council direct staff to modify the City's current pesticide management practices, up to an additional $117,200 annually may be needed to implement those changes.

BACKGROUND:
The City of Manhattan Beach maintains a variety of infrastructure and open space facilities that routinely require pesticide management for the control of pests. These facilities encompass 48 acres of parkland, the 21-acre Veterans Parkway greenbelt, street and parkway medians, parking lots, downtown and sidewalk streetscape, 43 buildings and structures, the sewer system, and various sports fields, some of which are owned by the Manhattan Beach Unified School District.

"Pesticides" is a generic term that encompasses a wide variety of products and applications to control various pests, including:

- Insecticides for insects
- Herbicides for invasive plants and weeds
- Rodenticides for rodents (rats, mice, or gophers)
- Bactericides for bacteria
- Fungicides for fungi

- Larvicides for larvae

Historically, the City and its maintenance contractors have applied these types of pesticides to control the following pest groups:

1. Broadleaf and grassy weeds in turf, hardscapes, the greenbelt, tree wells, and planter areas;
2. Rodents in buildings and recreational open spaces;
3. Insects (ants, spiders, etc.) in planters as well as inside and outside City buildings; and
4. Cockroaches in sewers.

A complete list of the pesticides that have been used throughout Manhattan Beach parks and facilities and their intended purpose is included the Attachment - Table of Pesticide Uses and Organic Alternatives.

During the October 2, 2018, City Council meeting, Council directed staff to discontinue use of Glyphosate (e.g., Roundup) in its applications in parks and open space, and directed staff to work with the Sustainability Task Force to develop organic options regarding pesticide use throughout Manhattan Beach.

DISCUSSION:
City Council is committed to reducing or eliminating the use of non-organic pesticides throughout the City. With the assistance of the Sustainability Task force, staff undertook an evaluation of the non-organic products currently used throughout the City and investigated a variety of manual and organic alternatives available on the market. The practices and products listed in the attachment summarize these alternatives, their relative efficacy and application potential (i.e., which pests they target and limitations of the alternative). Consideration was also given to use of non-organic products in a targeted manner, but only if deemed necessary to protect public health and only where pests cannot be effectively managed by other manual and organic methods.

In a few instances, staff and the Sustainability Task Force could not find a cost-effective herbicidal product that met weed control objectives without also harming desirable plants and landscaping. Most herbicidal organic products have narrow application potential, suggesting that they are not good choices for broad application. Manual control of weeds is the only really effective, non-toxic option for targeted weed control in turf areas, but is significantly higher in cost than chemical products applications.

The Recommendations section of this report includes staff's estimate of the cost associated with and impact of switching to manual labor and organic product uses.

The pesticide management summary is grouped into three basic categories:

1. Parks and Open Space
2. Buildings and Other Public Facilities
3. Sewer System

Parks and Open Space
This category is inclusive of medians, streets, turf, planters, planted slopes, sports fields, and natural

pathways such as the greenbelt, within the City's parks and open space areas. The predominant pest at these locations is weeds, and to a lesser extent, gophers. Although the City discontinued the use of glyphosate (e.g., Roundup) last fall in all weed control applications, the City has continued with limited application of Speedzone at City-owned parks and medians to control broadleaf weeds in turf because it is effective at killing weeds without also killing turf. Due to its overall efficacy, the product is typically only applied in the spring time. Additionally, Fusilade, and Sedgehammer have been used to control weeds in planters and medians as needed.

Kaput-D was used to control gophers in Polliwog Park last October, but has not been used since, and it has not been used in School District sports fields for more than one year. It is worth noting, however, that while gopher traps are an effective manual approach, they have not been utilized in parks and sports fields where there is broad community access due to concerns about humans and pets coming into contact with the traps. The only place traps have been set is at the Mira Costa baseball field because this location is gated and public access is controlled.

The organic weed and gopher control alternatives available include manual weeding, oils and extracts, vinegar mixtures, herbicidal soaps and traps. While these types of products can achieve desired results under certain conditions, they all have limitations in effectiveness, such as:

- Several organic products effective in controlling weeds are non-selective, meaning they kill all plants they come into contact with. They are good alternatives for targeted applications, (e.g. planter beds, concrete weeds), but not good for broad applications (e.g., dense landscaping and turf).
- Heat applications such as heat guns, boiling steam and torches can be very effective at killing weeds on surfaces that can sustain heat, such as driveways, sidewalks, roadways and other paved surfaces. However, because heat applications kill everything they comes into contact with, this option is not a good choice for controlling weeds in landscaped areas and turf.
- Manual weeding is labor intensive and can be costly, depending on the level of care desired. Weeding flowerbeds and small planters is relatively easy, while weeding ballfields and playground turf may require significantly more resources to effectively control the spread of weeds depending on the size of the turf area.
- Traps are effective at killing gophers. This method requires more labor resources to consistently set and check traps, especially for larger gopher tunnel systems. Smoking out gophers is another alternative, but also requires more labor effort than non-organic products like Kaput D, which is placed directly into gopher holes and buried, thereby limiting exposure to humans and pets.

City Buildings and Facilities

This category includes physical structures such as operational facilities (e.g. City Hall, Fire Station, Public Works Yard, sheds, etc.) and community buildings located in City parks (e.g., snack stands, studios, meeting halls, bathrooms). The primary pests in City buildings include insects (e.g., ants, cockroaches, spiders, silver fish, flies, wasps), rats and mice. Some products used by the City target specific insects and rats, while others have broader applications. Most products can be used both indoor and outdoor and come in a variety of forms, including liquid, gel and spray. In City applications, these products are primarily used in areas with limited human and pet exposure -

typically in attics, walls, crawl spaces, cupboards, and along building perimeters.

There are a large number of organic products on the market that have proven to be fairly effective at controlling building pests, inclusive of bio-pesticides, oils and granular applications. Additionally, traps are effective for capturing rats and mice, and there are some organic "edibles" that can kill mice 2-3 days after ingestion, although the products present health challenges if eaten by pets (it is unclear if the organic pest control products could also affect wildlife ingesting the poisoned vermin). For any organic products used, it will be imperative to ensure that they are effective enough to maintain public health standards for working and public-use environments.

Sewer System
Insecta is the only product used by the City to control roaches in the sewer system. Although highly toxic to roaches, other insects, birds and fish, this particular product is extremely limited in its use and does not come into contact with humans, pets and other wildlife. A small quantity of the active ingredient, Chlorpyrifos, is encapsulated into latex paint and painted inside the upper portion of sewer manholes, killing any cockroaches that come into contact with the product for up to two years. The active ingredient is released when it comes into contact with cockroach mucous. There are no other products on the market that kill cockroaches in the sewer system this effectively because they do not bind to the sewer walls like this product does. Lastly, because the product is embedded in latex paint, it does not wash away like other cockroach products.

Recommendations
The attached table of Pesticide Uses and Organic Alternatives summarizes the specific products that have been used throughout the City and provides a toolbox of manual and organic alternatives that can be employed to manage pests throughout the City's indoor and outdoor facilities. Please note that the alternatives are not prioritized in order of preference because each product should be considered based on best-fit for the target pest to be eradicated.

Staff and the Sustainability Task Force recommend that the following approaches be implemented as the City's best overall pest management strategy and that they become the foundation for the Integrated Pest Management (IPM) Plan to be finalized following City Council direction:

1. Ban all use of non-organic products in the control of weeds (herbicide) in parks and open space. Instead, use a combination of organic products, manual weeding and heat. Organic products that should be considered include:

    - Corn gluten meal
    - Vinegar solutions
    - Herbicidal Soaps
    - Matran, Burnout II and Weedzap
    - Avenger
    - Skythe
    - Suppress

2. When replacing landscaping, select plants that naturally repel rodents. Consider selecting a pilot demonstration area to test the effectiveness of this approach.

3. Instead of using rodenticides, use manual efforts to trap gophers in parks, sports fields and other open space. Evaluate the risk of humans and pets coming into contact with the traps. Report back on the success of these efforts to determine whether this approach is working or whether other strategies should be employed.

4. Prioritize the use of organic products in City buildings and other facilities to control building pests. Only consider non-organic products where pest problems persist and cannot be controlled by organic means. Priority consideration should be given to using:

- Bio-pesticides
- Ecovia EC
- Essentria IC3/granular

5. Discontinue use of First Strike rat bait and instead use a combination of traps and Terad3BLOX rat bait, which is concentrated vitamin D3.
6. Continue to use Insecta for the control of cockroaches in the sewer system where there is no human or pet contact. There are no other effective organic products available.
7. Consider the public health, animal health and environmental benefits associated with eliminating the use of non-organic products. Approve a $117,200 annual budget increase in FY 2019/20 to cover the costs for increased manual weeding and use of organic products to the City's landscaping and pest control contracts, as well as contract amendments as follows:
    a. Up to $100,000 per year for the Merchants maintenance contract to cover manual weeding and increased costs for organic product use in City parks, medians and open space. The current annual contracted rate is $565,644.
    b. Up to $7,200 annually ($600/month) for the Dewey Pest Control contract to cover the increased cost of organic products for the control of insects, rats and mice at City buildings and facilities (interior and exterior).
    c. Up to $10,000 annually for the Dewey pest control contract to cover the cost for trapping gophers. Gopher trapping is $75.00 for each trap and $75.00 per hour for labor to install and retrieve the traps. Staff estimates this would cover approximately 100 traps per year at all City parks, sports fields and other open spaces.
8. Implement a broad education campaign informing residents of the City's move toward more environmentally-friendly pesticide control strategies, and promote this more natural outdoor environment through social media, signage, printed material, etc. This effort can be completed with in-house resources on a recurring basis.

9. Undertake periodic review of the landscaping and maintenance efforts underway, and make recommendations, as needed, based community group and user feedback.

The final direction given by City Council will be incorporated into a IPM Plan finalized for all future use of pesticides throughout Manhattan Beach.

PUBLIC OUTREACH:
Staff worked with the Sustainability Task Force to consider options on future pesticide management practices to be used throughout Manhattan Beach. Once City Council direction is given, staff will develop and implement an outreach plan accordingly.

ATTACHMENTS:

1. Table of Pesticide Uses and Potential Organic Alternatives
2. EPA Pesticides Information
3. Pesticide Material Safety Data Sheets