



Midpeninsula Regional  
Open Space District

R-14-148  
Meeting 14-34  
December 10, 2014

## AGENDA ITEM 6

### AGENDA ITEM

Adoption of a Final Environmental Impact Report for the Integrated Pest Management Program, and Approval of the Integrated Pest Management Program and Policy

### GENERAL MANAGER'S RECOMMENDATIONS

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1. Adopt the Resolution of the Board of Directors of the Midpeninsula Regional Open Space District (MROSD) certifying the Final Environmental Impact Report (EIR) and adopting Findings of Fact and a Mitigation Monitoring and Reporting Program in accordance with the California Environmental Quality Act (CEQA) for the Integrated Pest Management Program (Attachment 1).
2. Approve the Integrated Pest Management Policy for incorporation into the District's Resource Management Policies as a replacement for the Invasive Species Management Policy (Attachment 2).

### SUMMARY

The Integrated Pest Management Policy and the Integrated Pest Management Program ('IPMP' or 'project') would comprehensively guide management of all pests on District properties. The project establishes procedures for careful management of pests throughout the District's open space preserves (OSPs) while protecting natural resources and public health. The Board of Directors (Board) is considering certification of the Environmental Impact Report, and approval of an Integrated Pest Management Policy and Program.

### DISCUSSION

#### Project Description

The District is implementing a formal IPMP to provide comprehensive guidance for the management of plant and animal pests on District properties through the adoption of an IPM Policy and an IPM Guidance Manual. The IPM Policy identifies the Board's goals and direction for pest management. The IPM Guidance Manual provides comprehensive guidance to those who will implement the IPM Policy on District properties.

Within the District, the situations that trigger the need for pest control fall into five distinct pest management categories: (1) buildings; (2) recreational facilities; (3) fire management areas; (4) rangelands and agriculture properties; and (5) natural areas. The IPM Guidance Manual identifies specific pest management actions including: preventative and maintenance measures; damage assessment procedures; tolerance levels and thresholds for action; and manual, mechanical and chemical treatment options. These IPM management categories and treatment

methods are summarized in Sections 3.4 and 3.5 of the Draft Environmental Impact Report (DEIR) and described in greater detail in Chapters 6 through 10 of Appendix B of the DEIR.

IPM is a process of efficiently managing pests while protecting human health and environmental quality. IPM is a long-term, science-based, decision-making system that uses a specific methodology to manage damage from pests. IPM requires monitoring site conditions before, during, and after treatment to determine if objectives are being met and if methods need to be revised. IPM requires that non-chemical methods be considered before chemical methods (i.e., herbicides, insecticides). If chemical methods are necessary to meet a pest control objective, the potential for harm to the public and workers are carefully considered, as are effects on the environment, and then the least toxic and most effective, efficient, and target-specific method is chosen.

Overall objectives of the IPM Program include: preservation of biodiversity and natural resource values; demonstrated use of lower pesticide worker health/exposure classifications in buildings and recreational structures; public notification and communication regarding IPM activities; compliance with the list of approved pesticides; reduction of pesticide use in buildings; and reduction in per-acre herbicide use at individual sites in natural areas over time.

As part of the IPMP, the District will designate an IPM Coordinator and an IPM Coordination Team. The IPM Coordinator and the IPM Coordination Team would review pest management projects for consistency with the IPM Guidance Manual, and oversee licensing, training and safety. Pest management activities would be reviewed and approved and priorities would be set through the development and approval of an Annual IPM Work Plan that describes pest control projects planned for the upcoming year. Any new pest management activities not originally included in the Annual IPM Work Plan would be reviewed on an individual basis throughout the year. Chapter 3 of Appendix B of the DEIR provides a detailed description of the IPMP roles and responsibilities, management systems, and organizational processes that would be used to implement IPM on District lands.

An Annual IPM Report presented to the Board of Directors would summarize the work completed in the previous year, evaluate the program's progress in meeting overall goals, and would recommend any modifications to the program.

The District has developed Best Management Practices (BMPs) that consist of management actions the District would incorporate into IPM proposals for the purpose of protection of human health and preventing significant environmental effects. The District would implement the BMPs as an element of the project. District BMPs for IPMP are presented in Table 3-4 of the DEIR.

The IPM Guidance Manual is intended to have a ten-year planning timeframe. The EIR covers the program of activities described in the IPM Guidance Manual. The IPM Guidance Manual is intended to provide the District flexibility in the design of its annual IPM activities and to allow incremental growth in the program. The District would need to reassess the EIR and the IPM Guidance Manual if new chemicals with different active ingredients are proposed, or if future IPM activities are of either substantially different type or substantially greater amount from those described in the IPM Guidance Manual and EIR. The District may need to amend the IPM Guidance Manual and prepare appropriate subsequent/supplemental environmental documents if the original EIR does not adequately evaluate impacts resulting from these new activities.

### Project Alternatives

Pursuant to CEQA, the Draft EIR evaluates three project alternatives: the No Project Alternative, the Enhanced Early Detection and Rapid Response Alternative, and the Pesticide Avoidance in Buildings Alternative.

The Enhanced Early Detection and Rapid Response (EDRR) Alternative was considered the environmentally superior alternative in the EIR because it would require increased surveys for pests and rapid treatment to eradicate them from District lands. Implementing a comprehensive EDRR program under this alternative would require a significant increase in staffing and funding above current levels in order to survey all existing and new properties for pest problems and to quickly treat a majority of these pest populations.

The preferred alternative assumes future IPM activities would be conducted without an increased level of staff or funding except for the addition of a new Integrated Pest Management Coordinator. The preferred alternative achieves the overall objectives of the project and includes some additional early detection surveys for new pest problems and gradual treatment of the highest priority pest problems over time but lower priority pest problems will not be managed.

### Recommended Actions

As lead agency, the District has principal responsibility for approving and carrying out the proposed project. At the December 10, 2014 meeting, the Board is being asked to consider taking the following actions:

- 1) Adopt a Resolution certifying the Final Environmental Impact Report (EIR) and adopting Findings of Fact and a Mitigation Monitoring and Reporting Program in accordance with CEQA (Attachment 1);
- 2) Approve the Integrated Pest Management Policy for incorporation into the District's Resource Management Policies as a replacement for the Invasive Species Management chapter of that policy document (Attachment 2).

### CEQA Overview

The environmental analysis revealed potentially significant impacts in the following areas: Biological Resources, Cultural Resources, and Hydrology and Water Quality. All potential impacts are reduced to less-than-significant levels through the incorporation of standard mitigation measures. Potentially significant impacts and mitigation measures discussed in the EIR are summarized below.

#### *Biological Resources*

As discussed in Section 4.2 of the EIR, "Biological Resources," manual, mechanical, or chemical IPM treatments could result in direct mortality of special-status amphibian, reptile, fish, invertebrate and mammal species, and impacts to their federally designated critical habitat and to federally protected wetlands. The Draft EIR includes best management practices and mitigation measures that will avoid, reduce or compensate for impacts to these special-status species, their critical habitat and wetlands, and will reduce the potentially significant effects of the project to a less-than-significant level.

### *Cultural Resources*

As discussed in Section 4.3, “Cultural Resources,” manual and mechanical IPM treatments for control of rodents and insect pests in buildings could change the significance of an historical resource by incorporating retrofits to structures. Ground-disturbing IPM treatments could unearth human remains. The Draft EIR includes mitigation measures that require specific procedures if IPM activities would result in changes that would be visible on the exterior of historic-age structures (greater than 50 years). These procedures require that a qualified architectural historian evaluate the structure for eligibility for listing on the California Register of Historic Resources. If eligible, the District would follow the Secretary of the Interior’s recommendation for alteration of the structure. The Draft EIR includes mitigation measures that require specific federal and state code and procedures be followed if human remains are encountered during earth-disturbing activities. These mitigation measures would reduce potential impacts to cultural resources to a less-than-significant level.

### *Hydrology and Water Quality*

As discussed in Section 4.4, “Hydrology and Water Quality,” manual IPM treatments could result in discharge of sediments into aquatic areas, and chemical IPM treatments could result in violations of water quality standards or waste discharge requirements. The Draft EIR includes best management practices and mitigation measures that will reduce the potentially significant effects of the project to a less-than-significant level.

### Public Review and Comments

The Draft EIR public review period ended on November 10, 2014. The announcement of availability of this document was given wide distribution among the public and responsible agencies.

In accordance with §15088 of the CEQA Guidelines, MROSD, as the lead agency, has reviewed the comments received on the Draft EIR for the Project and has prepared a Final EIR, which includes written responses to the comments received. The Draft EIR generated two individual written comment letters. The written comments received on the Draft EIR and the responses to those comments are provided in the Final EIR, which was released on December 5, 2014 for public review. Major themes of comments and responses are summarized below.

- The California Department of Forestry and Fire Protection states that it is hopeful that the District will develop additional shaded fuel breaks in the future and that maintenance of these fuel breaks are included within the scope of the IPMP. If new fuel breaks are developed on District lands as part of separate fuel management projects, the maintenance activities associated with these new fuel breaks will be reviewed to determine if they are included within the scope of the IPMP and EIR.
- The San Francisco Public Utilities Commission (SFPUC) acknowledges a statement in the DEIR that the District will comply with more stringent pesticide regulations on non-District lands in which they have agreements with other agencies to utilize their land such as one MROSD trail in Pulgas Ridge OSP that crosses SFPUC property. The District intends to comply with San Francisco Pesticide Ordinance where MROSD IPM activities occur on lands under the control of the City and County of San Francisco and SFPUC, and will comply with the Environmental Protection Agency’s Stipulated Injunction regarding pesticide use as it pertains to California red-legged frog critical habitat.

## **FISCAL IMPACT**

Future increased costs associated with implementation of the Integrated Pest Management Program will be primarily from the hiring of an Integrated Pest Management Coordinator to manage and monitor the program and provide annual reporting to the Board. The IPM Coordinator will be a new position with the job duties anticipated to require between one half to full time. The position will also fulfill other Natural Resources Department vegetation management duties with the balance of the time. Actual job duties and time allocation will be reported to the Board during the program annual review. This IPM Coordinator position will be considered by the Board as part of the mid-year budget recommendations on December 17, 2014, with recruitment to occur in the January to March 2015 timeframe. Limited duties of the IPM program will be assumed by existing Natural Resources Department staff in the meantime, or if the position is not approved by the Board.

Implementation of the IPM Program may result in additional staff workload impacts in the Operations Department related to managing District lands according to the methods and principles established in the IPM Program. Although difficult to predict at this time, the annual review and monitoring components of the IPM Program will allow the General Manager the opportunity to review staffing and operational impacts of the program and make adjustments as necessary.

## **BOARD COMMITTEE REVIEW**

Review of the Integrated Pest Management Program was requested by the full Board of Directors.

## **PUBLIC NOTICE**

Notices providing information about this meeting of December 10, 2014 and where to review or download the Final EIR and project documents were sent to all responsible and trustee agencies on December 3, 2014. Similar notices were sent to 372 interested parties and tenants by postal or electronic email; posted on all signboards in all District OSPs, in two newspapers, on the District's website and with the County Clerks of San Mateo, Santa Clara and Santa Cruz Counties and the State Clearinghouse; and review copies of the Draft EIR were provided at the City of Mountain View library, and the Administrative, Skyline and Foothill offices of MROSD.

Copies of the Final EIR were mailed on December 3, 2014 to the agencies that commented on the Draft EIR. Review copies of the Final EIR and other documents were made available at the District's administrative office in Los Altos, and provided for download on the District's website.

As stated in the EIR, the Draft EIR was circulated on September 26, 2014 and the comment period concluded on November 10, 2014. Two comments were received as described above.

Additional public outreach and notification regarding the IPMP occurred for the May 8, 2013 and July 23, 2013 Board Study Sessions on the IPM Policy (R-13-22); a September 30, 2013 CEQA Scoping meeting on the IPMP; an August 20, 2014 Board Special Study Session on the IPMP (R-14-106); and an October 21, 2014 Public Information Meeting on the IPMP.

**NEXT STEPS**

If the Board adopts the EIR and the IPM Program as proposed, staff will move forward with implementation of the Integrated Pest Management Program, phasing in the program as staffing and resources allow. The General Manager will be recommending to the Board in the mid-year budget recommendations on December 17, 2014 approval of a new IPM Coordinator position in the Natural Resources Department. The Integrated Pest Management Policy will be incorporated into the District's Resource Management Policies (see Report R-12-05) and will replace the Invasive Species Management Policy (Chapter 4).

## Attachment(s)

1. Resolution Certifying the Final EIR and adopting Findings of Fact and the Mitigated Monitoring and Reporting Program for the Integrated Pest Management Program
2. Integrated Pest Management Policy

Responsible Department Head:

Kirk Lenington, Natural Resources Manager

Prepared by:

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Contact Person:

Cindy Roessler, Senior Resources Management Specialist

**RESOLUTION NO. 14-xx**

**RESOLUTION OF THE BOARD OF DIRECTORS OF MIDPENINSULA REGIONAL  
OPEN SPACE DISTRICT CERTIFYING THE FINAL ENVIRONMENTAL IMPACT  
REPORT FOR THE INTEGRATED PEST MANAGEMENT PROGRAM AND  
ADOPTING FINDINGS OF FACT AND A MITIGATION MONITORING AND  
REPORTING PROGRAM IN ACCORDANCE WITH THE CALIFORNIA  
ENVIRONMENTAL QUALITY ACT**

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WHEREAS, the Midpeninsula Regional Open Space District (the “District”) is a lead agency, as provided for under §21067 of the California Environmental Quality Act (“CEQA”); and

WHEREAS, the District is proposing a project known as the Integrated Pest Management Program (“IPMP” or “Project”) to comprehensively guide management of pests on District properties, with the intent of formalizing and streamlining the procedures for careful management of pests throughout the District’s open space preserves (“OSPs”) while protecting natural resources and public health; and

WHEREAS the District determined that the project may have a significant effect on the environment and thusly concluded an Environmental Impact Report (“EIR”) would be needed to satisfy the requirements of the California Environmental Quality Act with respect to informing the public and the Board of Directors of the Midpeninsula Regional Open Space District (“Board of Directors”) as to the environmental impacts, mitigation measures, and alternatives to said project; and

WHEREAS, a Notice of Preparation (“NOP”) was filed with the California Office of Planning and Research on September 16, 2013 and distributed to involved public agencies and interested parties for a 30-day scoping period that concluded on October 15, 2013, to initiate the EIR process and collect written comments on the scope of issues to be addressed in the Draft EIR; and

WHEREAS, a public scoping meeting was held on September 30, 2013 to gather public input on the environmental issues to be addressed in the Draft EIR; and

WHEREAS, a Notice of Availability and Notice of Completion of a Draft EIR were published on September 26, 2014; and

WHEREAS, the Draft EIR was circulated for a 60-day period that concluded on November 10, 2014 and filed with the California State Office of Planning & Research under State Clearinghouse No. 2013092033; and

WHEREAS, a public information meeting on the Draft EIR was held on October 21, 2014 to provide information to the public regarding the Draft EIR; and

WHEREAS, on December 3, 2014, the Final EIR was published and addressed all comments raised on the environmental issues associated with the project; and

WHEREAS, Section 21000 *et. seq.* of the California Public Resources Code and Section 15000 *et.seq.* of Title 14 of the California Code of Regulations (“CEQA Guidelines”) which govern the preparation, content, and processing of environmental impact reports, have been fully implemented in the preparation of the EIR; and

WHEREAS, on December 10, 2014, the Final EIR for the Project was presented to the Board of Directors. The Final EIR includes the Draft EIR, all comments and recommendations received on the Draft EIR, a list of all persons, organizations, and public agencies commenting on the Draft EIR, the responses to comments made on environmental issues associated with the project, and all revisions to the Draft EIR (collectively, the Final EIR for the Project).

**NOW, THEREFORE, BE IT RESOLVED** by the Board of Directors, as follows:

1. The Final EIR was completed in compliance with the California Environmental Quality Act of 1970 (Cal. Public Resources Code section 21000 *et seq.*), as amended, and the State Guidelines thereto (Cal. Code of Regs. 15000 *et seq.*).
2. The Final EIR was presented to the Board of Directors and was independently reviewed and considered by the Board of Directors.
3. The Final EIR reflects the Board of Directors’ independent judgment and analysis.
4. Exhibit A, Findings of Fact, attached hereto and incorporated herein, are made by the Board of Directors. The Project will not result in any significant and unavoidable environmental impact which cannot be mitigated. The findings contained in Exhibit A are supported by substantial evidence in the record.
5. Exhibit B, Mitigation Monitoring and Reporting Plan, attached hereto and incorporated herein, is adopted to ensure implementation of the mitigation measures identified in the EIR. The mitigation measures shall be binding upon the District and any affected parties. The Final EIR adequately addresses the environmental impacts, mitigating measures, and alternatives to the project. The Board of Directors hereby certifies the Final EIR in accordance with the requirements of CEQA.
6. The General Manager or designee shall file a Notice of Determination.

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## IV. INTEGRATED PEST MANAGEMENT

### BACKGROUND

#### Integrated Pest Management

*Pesticide is a broad term that includes any material (natural, organic, or synthetic) used to control or prevent pests including herbicides (weed or plant killers), insecticides (insect killers), and rodenticides (rodent killers) as a few examples.*

**Integrated pest management (IPM)** is a process for efficiently managing **pests** while protecting human health and environmental quality. IPM is a long-term, science-based, decision-making system that uses a specific methodology to manage damage from **target pests**. IPM requires monitoring site conditions before, during, and after treatment to determine if objectives are being met and if methods need to be revised. IPM requires that non-chemical methods be considered in addition to chemical methods (i.e., **pesticides**, herbicides, insecticides). If chemical methods are necessary to meet a pest control objective, the potential for harm to the public and workers are carefully considered, as are effects on the environment and **non-target organisms**, and then the least toxic and most effective, efficient, and target-specific method is chosen.

#### The Problem with Invasive Species

*Invasive species can alter ecosystem processes by changing biotic ecosystem characteristics (such as plant community composition, structure, and interactions; trophic relationships; and genetic integrity) and abiotic characteristics and processes (such as fire regimes, erosion, sedimentation, hydrological regimes, nutrient and mineral conditions, and light availability).*

**Invasive species** are animal or plant species that invade and dominate sufficiently large areas causing a reduction in **biodiversity**. They proliferate in the absence of natural control and interfere with the natural processes that would otherwise occur on **wildlands**. Once established, invasive species can become difficult to manage and they can eliminate native species or otherwise alter the **ecosystem**. This chapter addresses the management of invasive species in order to protect the native species and natural processes of the preserves.

## Invasive Plants

**Invasive** plants have greatly altered many of California's natural plant communities. Because they originated elsewhere, many invasive plants are not susceptible to **predation** or diseases of this region. They are extremely adaptable and can thrive in a wide range of conditions. They can grow quickly, reproduce early, produce many long-lasting seeds, and tolerate disturbance. They reduce native biodiversity by gradually crowding out or competing with native plants for water and sun, and by reducing or modifying wildlife **habitat**.

## Invasive Animals

Ranking second to loss of habitat resulting from human intrusion, invasive animals pose another threat to native wildlife. Escaped domestic animals and other non-native wildlife species can thrive in the favorable climate of the San Francisco peninsula. Once established in a preserve, they compete for valuable **resources** and disturb the sensitive balance of natural **food webs**. Bullfrogs and wild pigs are examples of invasive introduced animals found in District preserves that physically displace or predate upon native plants and wildlife.

Programs to manage pests require long-term commitment. With many invasive plant and animal species, short-term lapses in management activity may negate years of expensive control programs.

*Wild (feral) pigs are an example of an invasive wildlife species with obvious impact on District lands. They have been widespread in the central coast of California since about 1970, reproduce rapidly, dig up meadows and wetlands, and carry diseases that can affect people and livestock. They eat acorns, bulbs, and soil animals, and are difficult to control. Feral pigs were abundant in the South Skyline region in the 1990s. The District has been trapping feral pigs since 2000 and has substantially reduced their population and damage from their rooting.*

## INTEGRATED PEST MANAGEMENT GOALS, POLICIES, AND IMPLEMENTATION MEASURES

**Goal IPM- Control pests by consistent implementation of IPM principles to protect and restore the natural environment and provide for human safety and enjoyment while visiting and working on District lands.**

*Best management practices for preventing the introduction of invasive species include cleaning equipment before leaving a weedy site, and using seed, plant, forage, fill, erosion-control and other materials that are free of weed seeds.*

*The California Invasive Plant Council maintains an Invasive Plant Inventory that rates the threat of non-native plant species by evaluating their ecological impacts, invasive potential and ecological distribution. Along with local knowledge, the District uses this list to evaluate the invasive risk of existing and new non-native plants found on District preserves.*

Policy IPM-1 Develop specific pest management strategies and priorities that address each of the five work categories.

- ◆ Manage pests in buildings to support existing uses, while also protecting human health and surrounding natural resources.
- ◆ Manage pests and potential human interactions in recreational facilities to minimize conflict, ensure visitor safety and enjoyment, and protect the surrounding natural resources.
- ◆ Manage pests in fuel management areas to reduce risk to human life and property, while also protecting natural resources.
- ◆ Manage pests in rangelands and on agricultural properties to support existing uses, while also protecting human health and surrounding natural resources.
- ◆ Manage invasive species in natural areas and set priorities for their control based on the potential risk to sensitive native species and loss of native biodiversity.

Policy IPM-2 Take appropriate actions to prevent the introduction of new pest species to District preserves, especially new invasive plants in natural areas, rangelands, and agricultural properties.

Policy IPM-3 Manage pests using the procedures outlined in the following eight implementation measures.

- ◆ Develop and implement tolerance levels for pests within each of the Work Categories to determine when to undertake pest control.
- ◆ Identify the pest, determine its life cycle and disruptive potential, and identify relevant site conditions prior to implementing a pest control activity. Review pest control objectives for consistency with other site goals and establish tolerance levels that must be exceeded before pest control is undertaken.
- ◆ Choose site-specific strategies and times of treatment that provide the best combination of protecting preserve resources, human health, and non-target organisms and that are efficient and cost effective in controlling the target pest. Whenever feasible, direct the control method narrowly at vulnerable points in the target organism's life cycle to avoid broad impacts.
- ◆ Monitor results and modify control methods over time as site conditions and treatment techniques change and as needed to obtain an effective level of control.
- ◆ Use the least harmful method(s) to control identified pests. Where the use of pesticides is necessary, apply according to the label using all safety precautions and take all measures needed to protect the environment, the health and safety of visitors, employees, neighbors, and the surrounding natural areas including water and soil resources.
- ◆ Plan for repeat treatments as indicated by the pest's regenerative capabilities.
- ◆ Coordinate and cooperate with adjacent landowners, neighbors, and other responsible agencies to control pests and limit secondary effects.
- ◆ If eradication of a pest from a distinct location is not feasible, apply measures to achieve containment, sustained control, slow down a pest's rate of spread, or minimize pest damage.

*Prior to the approval of the use of any new biological control agent, the US and California Departments of Agriculture conduct years of laboratory and field studies to assess the candidate's host specificity and its potential impact on target and nontarget species and environmental safety.*

*The District coordinates with the San Mateo County and Santa Clara County Weed Management Areas, the California Invasive Plant Council, the California Department of Fish and Game, the California Department of Food and Agriculture, County Agricultural Departments, and the Cooperative Extension Service to stay informed on invasive plants and animals, IPM techniques, and pesticide regulations.*

**Policy IPM-4** Monitor pest occurrences and results of control actions and use adaptive management to improve results.

MIDPENINSULA REGIONAL OPEN SPACE DISTRICT  
RESOURCE MANAGEMENT POLICIES I  
NTEGRATED PEST MANAGEMENT

**Policy IPM-5** Develop and implement an IPM Guidance Manual to standardize pest management and IPM procedures across all District Lands.