

Contra Costa County Integrated Pest Management Program

Annual Status Report 2009

BACKGROUND

This report is the seventh annual status report on the County's Integrated Pest Management (IPM) program since the Board of Supervisors adopted the IPM policy in November 2002. The Board adopted this policy in response to one of the recommendations in a report called *Pesticides in Contra Costa County* published in March 2001 by the County's Public and Environmental Health Advisory Board (PEHAB). When the policy was adopted, the Board of Supervisors recognized that budget constraints prevented them from fully funding all the recommended IPM programs, including the establishment of a full-time IPM coordinator. The Board established an Integrated Pest Management Task Force to facilitate the implementation of the County's IPM policy. The Task Force was directed to focus its efforts on objectives that could be accomplished within the County's existing administrative structure and financial resources.

On April 1, 2008, the Board of Supervisors approved the establishment of a full-time IPM coordinator position within the Health Services Department and directed the establishment of an IPM Technical Advisory Committee to supersede the IPM Task Force. The IPM coordinator assumed her position on January 26, 2009, and immediately began working with the IPM Task Force to transition them into an advisory committee and to implement the IPM policy based on priorities set by the Board of Supervisors at their January 20, 2009 meeting.

In their sixth annual status report dated December 15, 2008 the IPM Task Force recommended that an IPM Advisory Committee be established rather than an IPM Technical Advisory Committee. They recommended that the membership of the IPM Advisory Committee be changed from that laid out in the 2002 IPM policy, replacing the UC Cooperative representative with a person with expertise in IPM, adding a general member of the public, adding storm water representation by either the Clean Water Program or the County Watershed Program, and replacing the representative from a pesticide applicator trade association with a representative from the pest management company currently contracted to manage County facilities. Representation from County Departments, PEHAB, and the County's Fish and Wildlife Committee would remain unchanged. The Board of Supervisors approved these changes on January 20, 2009, and the IPM Task Force assumed the composition of the IPM Advisory Committee approved by the Board.

The IPM Task Force met six times in 2009 and a pesticide subcommittee formed by the Task Force met three times. The IPM Coordinator also provided seven status reports to the Transportation, Water and Infrastructure Committee of the Board of Supervisors during the course of the year.

On November 10, 2009 the Board of Supervisors approved the bylaws of the new IPM Advisory Committee, effectively dissolving the IPM Task Force. The composition of the new IPM Advisory Committee as approved by the Board of Supervisors reflected an additional change recommended by the IPM Task Force: an increase in the number of at-large public members from two to three. The Board of Supervisors also stipulated that the pest management contractor seat be a non-voting member and that members must reside or work in Contra Costa County and shall reflect the ethnic, racial, and geographic diversity of the County. The first meeting of the new IPM Advisory Committee will be in January of 2010.

2009 ACCOMPLISHMENTS OF THE IPM TASK FORCE AND THE COUNTY'S IPM PROGRAM

1. Established a formal advisory body to the Board of Supervisors called the Integrated Pest Management Advisory Committee (Coordinator and Task Force).
2. Developed a policy governing posting and notification of pesticide treatments by County departments on County-owned property (Coordinator and Task Force).
3. Explored the benefits of developing a County IPM ordinance (Coordinator and Task Force).
4. Created a pesticide subcommittee and initiated a comprehensive, scientific review of pesticides used by County departments (Coordinator with help from Departments and Task Force).
5. Developed a Request for Proposal that stipulated IPM services for the pest management contract in County buildings, created a process for selecting a company, reviewed proposals submitted, and selected Pestec IPM Providers as the new structural IPM contractor for the County (Coordinator and General Services; Task Force members participated in selection process). Pestec of Antioch is considered by many to be California's premier IPM company and actively participated in the creation of the EcoWise Certification Program.
6. Hired a consultant to recommend alternatives to the pesticide applications by TruGreen in Special Districts along Camino Tassajara near Danville and along Stone Valley Road in Alamo (Coordinator and General Services).
7. Established priorities for the Advisory Committee, the Departments and the IPM Coordinator (Coordinator, Departments, and Task Force)
8. Began an in-depth analysis of the pest management programs in Public Works, General Services and Agriculture (Coordinator).
9. Created an IPM plan template for the Departments to use in 2010 to create their own IPM plans (Coordinator).
10. Began consolidating the Departments' electronic pesticide use reporting, and explored the advantages and feasibility of creating a Microsoft Access database instead of using Microsoft Excel to track use (Coordinator).
11. Conducted an exploratory investigation into the prevalence of bed bugs in the County that included outreach to the community and to County officials (Coordinator).
12. Performed IPM outreach and provided pest management technical assistance to County staff, members of the public, and city officials (Coordinator).
13. Created an IPM webpage on the Health Services Department (HSD) website (Coordinator with help from HSD staff).
14. Initiated a formal, quarterly networking process with other IPM coordinators in the Bay Area to discuss pest management issues (Coordinator).

2009 DEPARTMENT IPM PROGRAM HIGHLIGHTS AND CHALLENGES

Agriculture Department

Agriculture Department IPM Program Highlights

- The Department reduced its use of pesticides in FY 08/09 by 37.35% compared to its FY 07/08 usage. Furthermore, this is a 57.7% reduction when compared to 04/05 usage, and a 66.6% reduction compared to FY 00/01 usage.
- The Department secured a \$4,250 grant through the Contra Costa County Fish & Wildlife Committee for the purchase of 20 raptor perches to be used as a study to determine if ground squirrel populations can be reduced to acceptable levels through encouraged predation. The perches were installed in three selected locations this fall.
- Only one new infested site of Japanese dodder was discovered this year. Japanese dodder is a very aggressive parasitic plant that has the potential to severely alter the composition and function of riparian areas, as well as affect ornamental plantings and agricultural crops. It is classified as an “A” rated noxious plant by the California Department of Food & Agriculture and is listed as a Federal noxious weed. Because of this designation, it is under an eradication program by county departments of agriculture. Contra Costa’s Agriculture Department has continued to monitor all previously infested sites in the County and has found minor reoccurrence at only two sites. All removal continues to be mechanical, without the use of pesticides. Since April 4, 2004, Japanese dodder has been removed from 27 sites (46 distinct properties) in the County without the use of pesticides.
- This was the fourth year of red sesbania removal at Dow Wetlands. This weed is given a “Q” rating by the California Department of Food & Agriculture and as such is considered to have a high potential for environmental damage by displacing native plants and wildlife. A few red sesbania plants were removed in Grayson Creek and lower Walnut Creek by County Public Works. Additionally, the Agriculture Department removed or mitigated red sesbania through the official abatement process on the only five known residential properties that had red sesbania in their landscaping. All removal of red sesbania was performed mechanically or by hand. A total of 2,059 plants were removed this year compared to 492 in 2008, 833 in 2007 and 878 in 2006. Virtually all of the plants removed this year were seedlings that germinated from the seed bank (seeds on, or in, the soil).
- The Department continued hand-removal of new seedlings sprouting from the old seed bank of the only known infestation in Contra Costa County of the “B” rated noxious weed, kangaroo thorn. Total staff time to accomplish removal this year was 1.5 hours. The original removal at the site was accomplished in 2005 with four employees and 52 hours of staff time.

Agriculture Department Challenges

- Finding a Replacement for the Herbicide Telar®
The herbicide Telar® has been identified by the IPM Task Force as a pesticide of concern, and the Department would like to reduce or eliminate its use in our programs. Telar® is very effective on three noxious weeds: Perennial Pepperweed, White Horsenettle, and Russian Knapweed. This year the Department performed preliminary trials using a possible alternative, Milestone VM Plus®, on Perennial Pepperweed. Efficacy will not be known until next growing season.

General Services Department

General Services IPM Program Highlights

- The Facilities Division Manager and the IPM Coordinator prepared a Request for Proposal for the structural IPM contract for County buildings and created a process for selecting a company. With the unanimous support of the Task Force selection committee, General Services hired Pestec IPM Providers in December.
- All physical corrections identified by Orkin as necessary to reduce pest intrusion (e.g., door sweeps, caulking, and sealing foundation holes) were made.
- The Grounds Division applied approximately 400 cubic yards of wood chips as mulch in order to reduce weed growth. The wood chips were donated from tree maintenance companies.
- Since January 2009, the Grounds Division has not used any pesticides on turf around buildings or turf in parks maintained by the County.
- Three Grounds Division staff attended the Contra Costa Bay-Friendly Landscape Maintenance Training and Qualification Program.
- The Grounds Division Manager and the IPM Coordinator began a written survey of sites under management to record plants, pests, maintenance activities and schedules, and pest management activities in a comprehensive document.

General Services Challenges

- **Education of County Staff**
Having County staff understand the links between pest invasions and the presence of food waste and clutter is vital to the success of the structural IPM program. Educating County personnel on the principles of IPM and having them follow those guidelines is a considerable challenge.
- **Pest Exclusion in County Buildings**
It is very important that all deficiencies flagged by the pest management contractor be addressed in order to reduce pest intrusion into County buildings. While the Facilities Division has done an outstanding job this year of responding to the deficiencies identified by Orkin Pest Control—which also greatly reduces Orkin call-backs and saves the County considerable money—the new contractor, Pestec, may find additional deficiencies missed by Orkin.
- **Pest Exclusion in Leased Buildings**
Reducing pest intrusions into leased buildings is more of a challenge since the responsibility often falls to the landlord.
- **Budget for Structural Pest Control Services**
General Services maintained the same budget levels for contracted structural pest control by reducing building budgets in other areas. It will be very difficult to maintain current budget levels this next fiscal year. However, with a new pest management contractor, expenses may also be lower.
- **Mulching**
While mulching would reduce the amount of herbicide used in landscaped areas around County buildings, parking lots, and Special Districts, the Grounds Division is minimally staffed, with no additional funding for the mulching.

Public Works Department

Public Works IPM Program Highlights

- Since FY 00/01 when PEHAB first developed their list of pesticides of concern, Public Works has reduced the use of these products by 84%.
- Since FY 00/01, the Department has reduced overall pesticide use by 37%.
- The Department has eliminated the use of Diuron, another pesticide of concern. This product is no longer in the Public Works' inventory.
- Chemical control of weeds and other vegetation represented less than 25% of departmental expenditures on vegetation management during this period. Over \$1 million was spent on mechanical and manual weed removal.
- The Public Works Department partnered with Parents for a Safer Environment on a goat-grazing study along Pinole Creek.
- The Department has committed to conducting a more detailed grazing study to determine long-term cost effectiveness for vegetation management and to identify and quantify any adverse environmental impacts from this method.

Public Works Challenges

- **Loss of Gas Tax Revenue**
The State of California has threatened to appropriate the counties' share of gas tax revenue. These funds account for nearly all of the Maintenance Division Operating Budget. Loss of these funds would impact maintenance operations with devastating results. The Department is actively working to prevent this action.
- **Loss of Inmate Work Crew.**
Inmates from the County's Marsh Creek Detention Facility have provided Public Works with over 10,000 hours of labor per year, at a reduced rate, for the past 19 years. This program allowed the Department to increase the acreage under manual vegetation management (using brush cutters, chain saws, and hand tools), and reduce the acreage under herbicide management. Because of budget constraints this year, this program has been cut. The Department has not experienced the full impact of this decision yet. This will have an impact on the cost, timing, and extent of manual weed abatement in the future.

PESTICIDE USE BY THE COUNTY OF CONTRA COSTA

Since FY 00/01, the IPM Task Force has been annually reporting pesticide use data to the Transportation, Water, and Infrastructure Committee for the three departments involved in pest management: Agriculture, General Services, and Public Works. Since that time, pesticide use has been steadily decreasing. Table 1, below, compares figures for FY 00/01 with FY 08/09.

Table 1. Comparison of Pesticide Use in FY 00/01 and FY 08/09

Department	Total Lbs. of Active Ingredient used in FY 00/01	Total Lbs. of Active Ingredient used in FY 08/09	Reduction in Use
Public Works	16,569.43	10,365.95	37%
Agriculture	1,413.01	474.95	66%
General Services-Grounds	927.37	269.25*	71%

*includes pesticides used by TruGreen, a contractor to General Services

Note that since January, when the IPM Coordinator was hired, all turf under management by the County, both around buildings and in parks, is pesticide free.

There has been concern in the community and within the County about the use of “Bad Actor” pesticides by County departments. “Bad Actor” is a term coined by the Pesticide Action Network and Californians for Pesticide Reform to identify a “most toxic” set of pesticides. These pesticides are at least one of the following: known or probable carcinogens, reproductive or developmental toxicants, cholinesterase inhibitors, known groundwater contaminants, or pesticides with high acute toxicity.

The County’s use of these particular pesticides has decreased dramatically since FY 00/01 as shown in Table 2, below.

Table 2. Comparison of “Bad Actor” Pesticide Use in FY 00/01 and FY 08/09

Department	Total Lbs. of “Bad Actor” Active Ingredient used in FY 00/01	Total Lbs. of “Bad Actor” Active Ingredient used in FY 08/09	Reduction in Use
Public Works	5240.04	834.24	84%
Agriculture	56.39	2.98	95%
General Services-Grounds	649.14	13.97*	98%

*includes pesticides used by TruGreen, a contractor to General Services

It is important to note that pesticide use can increase and decrease depending on the pest population, the weather, the invasion of new and perhaps difficult to control pests, and the addition of new pest management projects to a department’s workload.

INTEGRATED PEST MANAGEMENT PRIORITIES FOR 2010

Agriculture Department Priorities for 2010:

- Contra Costa's highly effective Noxious Weed Program has been in operation for 28 years. A major objective of the Agriculture Department is to continue to monitor and treat targeted noxious weeds on all historic sites before they set seed. Preventing seed set is the most important factor in reducing weed populations and in depleting existing seed banks. By doing this we can decrease the hours of labor needed and amounts of herbicides applied in successive years to a particular area. This also allows the Department to add previously untreated sites to the Noxious Weed Program and brings us one year closer to local eradication of the targeted weed species.
- The Department has begun trials on herbicide alternatives to Telar[®] and will monitor those trials in the coming year to gather information on the efficacy of Milestone VM Plus[®] on various noxious weeds.
- The Department will complete an IPM Plan for the Noxious Weed Program this coming year.
- The Department will work with the IPM Coordinator to prepare a hazard screening of all pesticides used by the Department.
- The Agriculture Department will continue to have staff attend outside IPM seminars and training sessions given on a variety of pest management issues. The Department will develop a training database so that personnel who return from IPM seminars and workshops can store training and outreach materials in a way that will be easily accessible to other County staff members.
- The Department will develop a countywide map indicating which sections, townships and ranges within Contra Costa are listed by the most recent Bay Area Stipulated Injunction and Proposed Order (SIPO). This proposed injunction would restrict the use of 74 pesticide active ingredients in areas that are known or potential habitats of six endangered or threaten species found in Contra Costa. This map will serve as a tool to aid Department staff in informing property owners, property managers, and pest control operators who work within the county and who may be impacted by the SIPO.
- Over the next year, the Department will monitor each of the twenty raptor perches located in open spaces within the Cities of Concord (one location) and Walnut Creek (two locations). Each perch will be numbered and a database created to store pictures and field notes to help determine the success of the project. A PowerPoint presentation will be developed for Department personnel to use at various speaking engagements.

General Services Department Priorities for 2010

- General Services will prepare Departmental IPM Plans for both building and landscape maintenance.
- General Services and the IPM Coordinator will work with the newly hired structural IPM contractor to begin a new IPM program for County facilities, which will include training for County staff.
- The Grounds Division will work with the IPM Coordinator to complete the survey of all landscaped areas under management.
- The Grounds Division and the IPM Coordinator will work together to prioritize sites needing changes that will improve pest & weed prevention.
- The Grounds Division Manager and the IPM Coordinator will identify a range of solutions for landscape insect and weed problems.
- General Services will work with the IPM Coordinator to prepare a hazard screening of all pesticides used under the auspices of the Department.

Public Works Department Priorities for 2010

- In FY 09/10 the Department will reach or exceed a 90% reduction in the use of pesticides of concern (“Bad Actors”) compared to FY 00/01
- Public Works will prepare Departmental IPM Plans for the three types of sites under management: roadsides, flood control facilities, and real property (including the County’s two airports).
- The Department will work with the IPM Coordinator to prepare a hazard screening for all pesticides used by the Department.
- The Department will begin planning a three-year grazing study to determine long-term cost effectiveness for vegetation management and to identify and quantify any associated environmental impacts.
- The Department will continue to review vegetation management tools and techniques to make improvements where possible, and to examine the feasibility and cost of various alternatives to chemical weed control.
- Public Works will improve contract language for landscape maintenance contractors working for Special Districts, will educate those contractors about the County IPM Policy, and will identify ways to ensure that they comply with this policy.

IPM Coordinator Priorities for 2010

The IPM Coordinator’s work priorities for the coming year are the following:

- Assist the Departments in preparing their IPM Plans.
- Work with the Departments and the IPM Advisory Committee to begin a comprehensive, scientific review of pesticides used in the County and establish pesticide use criteria.
- Assist the Grounds Division in completing a written survey of sites under management and prioritizing sites needing changes to improve pest & weed prevention.
- Work with General Services and the newly hired structural IPM contractor to begin a new IPM program for County facilities, which will include training County staff.
- Track pesticide use in the County using Microsoft Excel.
- Work with the Departments to document funding needs for IPM programs.
- Explore avenues for educating County staff, city officials, and the general public about bed bug issues.
- Staff the IPM Advisory Committee.
- Make regular reports to TWIC, the Public and Environmental Health Advisory Board, and the Fish and Wildlife Committee.
- Continue outreach to City staff and the general public.
- Network with other IPM Coordinators in the Bay Area.
- Explore ways to make the information the Departments have regarding their IPM programs more easily accessible to the general public.

IPM Advisory Committee Priorities for 2010

- Screen applicants for the three public seats on the Committee, make recommendations to the County’s Internal Operations Committee, and seat new public members by March 2010

- Make a recommendation to the Board of Supervisors concerning the need for developing an IPM Ordinance.
- Assist the Departments and the IPM Coordinator in the comprehensive review of pesticides used in the County and the establishment of pesticide use criteria.
- Oversee implementation of the posting policy.
- Provide input to the Departments on the development of their written the IPM plans.
- Provide guidance to the Departments as they work on challenges that arise.