SANTA BARBARA COUNTY BOARD AGENDA LETTER



Clerk of the Board of Supervisors 105 E. Anapamu Street, Suite 407 Santa Barbara, CA 93101 (805) 568-2240 Agenda Number:Prepared on:06/03/05Department Name:First DistrictDepartment No.:011Agenda Date:6/21/2005Placement:DepartmentalEstimate Time:40 MinutesContinued Item:NOIf Yes, date from:Value

SUBJECT:	Report on Integrated Pest Management Stategy
	Thomas Fayram, Deputy Public Works Director, Ext. 3436 Jeremy Tittle, First District Office, Ext. 2186
STAFF CONTACT:	Rick Wheeler, Parks Director, Ext 2475
FROM:	First District Supervisor Salud Carbajal
TO:	Board of Supervisors

Recommendation(s):

That the Board of Supervisors:

- A. Receive and file a report on the status of the County's Integrated Pest Management Strategy (IPM).
- B. Provide direction to staff regarding the future of the IPM program..

Alignment with Board Strategic Plan:

The recommendation is primarily aligned with Goal No. 7. A Community that Fosters the Safety and Well-Being of Families and Children.

Executive Summary and Discussion:

On April 4, 2000 your Board adopted the Integrated Pest Management (IPM) Strategy and directed County Departments to implement the procedures for pesticide use outlined in that document. In 2003, the Strategy was updated to include new tasks to be undertaken by the County. The main goal of the IPM Strategy is to reduce the County's reliance on the use of pesticides by formalizing and increasing the County's application of IPM techniques. As part of the IPM Strategy, a Grounds Management Committee was established to coordinate activities, exchange information, review requests for new products, set goals and evaluate progress. Each department appointed an IPM Coordinator to oversee pilot projects to implement IPM

techniques. One of the requirements of the IPM Strategy is to compile a summary of pesticide use along with progress reports for each of the pilot projects to be submitted to the Board of Supervisors on an annual basis.

The IPM Strategy guides County Departments to implement the procedures for pesticide use reduction outlined in that document. Since that time, a number of actions have been taken by County staff to fulfill the recommended steps in the IPM Strategy Implementation Plan.

The Grounds Management Committee (GMC), which is made up of the IPM Coordinators from each department, was established immediately following the Board's adoption of the IPM Strategy in April 2000. The GMC has met quarterly to coordinate activities, exchange information, review requests for new products, set goals and evaluate progress. Each year, the IPM Coordinators have initiated and managed IPM pilot projects for their department in an effort to find cost-effective ways to reduce pesticide use in their operations. They have provided annual updates to the Board of Supervisors documenting the results of these pilot projects each year. (The 2004 Calendar Year updates are included in this Attachment following this general overview.) The Agricultural Commissioner's Office currently maintains the County-wide Pesticide Database, which tracks the types of pesticides used by each department and the amount used annually (calendar year) and is available in PDF form on the Green Team website (http://www.countyofsb.org/GreenTeam.htm).

The GMC has also conducted a review of the pesticides used by each department and has found that none of these pesticides are Tier 1 (most hazardous) pesticides. Replacement materials for Tier 1 pesticides which were applied for weed and vertebrate pest control in previous years have been found and adopted. Pesticides currently in use by County departments are the least hazardous alternatives available at this time and none of these chemicals are currently targeted for phase out. Aluminum phosphide, the only Tier 1 pesticide currently in use by County departments, is applied under a programmatic exception which is reviewed by the group annually.

Members of the GMC (particularly representatives from the Parks Department) have been actively reviewing and making recommendations for Landscape Plans for new construction and renovation projects in County-owned facilities.

The GMC has also established and utilized a process for reviewing requests for the use of new products by each department. In addition, the Grounds Management Committee has considered language for a Request for Qualifications for hiring a Pest Control Advisor (PCA) that incorporated the requirements of the IPM Strategy and specifically requested PCAs with IPM experience.

The development of the GMC has also facilitated the sharing of equipment and funding used in IPM techniques. Attachment A provides detailed information on IPM progress for Parks, Public Works (Flood Control, Resource Recovery and Waste Management, and Transportation), and General Services.

Mandates and Service Levels:

Approval of Recommendations A and B will not change programs or service levels.

Fiscal and Facilities Impacts:

Implementing the IPM Strategy does have fiscal impacts for each department. These costs are outlined in the updates for each division/department in Attachment A.

Attachment A

Department:ParksContact Name:Jim IsaacContact Extension:x5651IPM Coordinator:Richard Lindley

IPM Strategy Activities

In response to the Board of Supervisors adopted **Integrated Pest Management Strategy**, County Parks wishes to report the following summary of the year's activities from March 1, 2004 through February 28, 2005.

Pesticides were not used at the following parks:

- Lookout Park, Summerland
- Arroyo Burro Park, Santa Barbara
- Santa Barbara County Courthouse Sunken Garden
- Woof Pack Park, Santa Maria
- Technical Services Demonstration Garden, Santa Maria

In addition, herbicides were not used:

- Within 50 feet of playgrounds
- On lawn areas
- Around picnic tables & group picnic areas
- In the unincorporated open space areas of the 2nd Supervisorial District

Parks does occasionally use pesticides to treat botanical specimen plants and trees in order to protect their health and control exotic pests that attack them. We also use pesticides to control disease carrying vectors like rodents and mosquitoes. Occasionally, pesticides are used to control dangerous insects such as yellow jackets and Africanized bees. The material of first choice in all cases is always the least toxic material currently available to us.

Using non-chemical methods for landscape weed control is more expensive than chemical control because it is more labor intensive. However, once control is gained, costs may be reduced by adequate ongoing maintenance and the use of weed barriers, mulches, etc. Table 1 depicts the different weed control methods available to us and their estimated costs.

Weed Control Method	Avg. Cost per square foot.	Notes
Pesticide (RoundUp Pro)	\$0.01/ sqr ft.	Cost efficient, you usually spray twice a
		year.
Aquacide Unit (Hot Water)	\$0.13 / sqr ft.	This method is slow, taking about 5 times as long as weed spray. No toxicity issues and its use is more flexible. It must be done at least twice a year.
Hand Weeding (Hoe, etc.)	\$0.35 / sqr ft.	The slowest and most expensive control. No toxicity issues. Might be done 4 times a year.
Weeding (Mechanized Tools)	\$0.10 / sqr ft.	Slower than spraying. No toxicity issues. However, this operation must be performed 4 times a year.

Weed Control Methods Estimated Costs

Table 1.

Santa Barbara County Park Department's - Annual Pesticide Use Summary

Table 2 reports Park's pesticide for the calendar year of 2004 and compares usage for prior years back to 1999. The products listed were used at various county parks, open spaces, and facilities at various times.

The quantities of pesticides used is a reflection of several variables, including weather. Park's use of herbicides has tended to decline, while our use of rodent baits has varied from year to year as a reflection of rodent activity. 2004 was generally a very dry year, which seemed to drive larger numbers of rodents into our irrigated lawns and planters. Trapping rodents is usually infeasible due to the labor required, so rodenticide use becomes essential to control their numbers at acceptable levels.

2004 saw an increase in the amount of Roundup Pro herbicide used for weed control. Applications of the material were required in order for us to meet to new directives and mandates from County Fire for increased weed abatement in some of the larger north county open spaces and in New Cuyama. Herbicide was the only cost effective method available to us to meet the required abatement guidelines based on staffing, site location and budget constraints. And North County Operations does not have the optional equipment, such as the Aquacide Weed Control System, that are used in the South County to address weed control issues. The open spaces that required chemical treatment are large (over 10 acres), undeveloped, areas, often including steep terrain, that has not been weed abated in prior years. We believe that subsequent applications will be reduced in those areas that required treatment. However, should additional, new directives come from the Fire Department it may be necessary to increase herbicide applications to maintain weed control. As a possible mitigation, County Fire may be able to provide a "Hot Shot" crew to assist us with some of our weed abatement projects in the future. We also placed a \$50,000 budget expansion request in Park's 2004-2005 budget to enable us to contract with the California Department of Forestry for fire suppression and weed abatement work in these areas so less herbicide would be required for initial weed control. This request has not been funded at this time.

SANTA BARBARA COUNTY PARKS PESTICIDE USE 1999 TO 2004

Pesticide Product	1999 Base Year	2000 Use & % Change	2001 Use & % Change	2002 Use & % Change	2003 Use & % Change	2004 Use & % Change	Total Percentage Reduction or Increase since 1999
Round Up herbicide	57 gal.	54 gal. -5%	32 gal. -41%	28.8 gal. -10%	11.7 gal. -59%	14.9 gal. +27%	-73%
Surflan herbicide	57 gal.	22.3 gal. -61%	7.5 gal. -71%	2.8 gal. -63%	.3 gal. -89%	0	-100%
Wilco Gopher II rodenticide	160 lbs.	169 lbs. +6%	152.6 lbs. -10%	161.8 lbs. +6%	78.5 lbs. -51%	137.4 lbs. +75%	-14%
Wilco Squirrel rodenticide	24 lbs.	192 lbs. +700%	100.7 lbs. -47%	103.8 lbs. +3%	21 lbs. -80%	94.7 lbs. +351%	+294%
Rat Baits	15 lbs.	6.5 lbs. -57%	4.5 lbs. -31%	0	14 lbs. +211%	2 lbs. -86%	-87%
Pestcon Fumitoxin rodenticide	0	69.4 lbs.	0	0	3.7 lbs. -94%	5.9 lbs. +59%	-91%
Fire Power herbicide	0	0	0	0	9.2 gal.	0	-100%

Table 2

It should be noted that pesticide use is a reflection of several variables. For example, when resources and funding are available we choose to use less herbicide and rely more on weed control methods that cost more in time and labor such as flame torch units, hot water applicators, ceramic infra-weeders, mechanical weeders & mowers, and hand tools. Weather also plays a role in the quantity of pesticides used. For example, a dry winter results in less weed growth due shorter growing conditions in late winter and early spring before the soil dries out.

Our staff continues to pre-notify park users of planned pesticide use by posting signs in the areas to be treated at least 48 hours before applications occur. The English/Spanish notices also remain in place 48 hours after the application.

Non-chemical Pest Control Methods Used

We use several non-chemical pest control methods routinely:

- Earthworm castings are used to control giant white flies in plants at the Santa Barbara County Courthouse and other county grounds locations. The castings are mixed 1:1 with top dressing and applied in 2" thick layers under susceptible plants. Other than this treatment, there is currently no known control for this pest.
- Staff applied approximately 225 cubic yards of wood chips and mulch to control weeds in shrub beds. The materials come from County Solid Waste's recycling program and local tree service companies.
- Many acres of weeds were mowed as many as four times to prevent them from going to seed. Mowing continues until the weeds dry up.
- A <u>Smithco Aquacide Environmental Weed Control System</u> was used for weed control. The super heated water (up to 280° F+) it produces is applied to weeds to destroy their cellular structure, killing them. This unit provides us with a non-toxic weed control method that doesn't require the operator to have State certification. Breathing protection or protective clothing are not required when using it, and no harmful by products are left on the ground. The system can be used in windy or wet conditions and does not endanger people, pets, and wildlife in the application area. We use it to create mowing strips along roadways, fence lines, walkways, curbs, etc. Pre-notification postings are not required when using this unit.

The Aquacide system contributes to cost reduction by reducing the amount of herbicide purchased for perimeter weed control, but it is more labor expensive to use. The systems real value lies in the lack of toxic impact on the operator, park users, and the environment. We plan to continue to use this equipment for revegetation projects and routine weed control as staffing permits.

- <u>Propane Flame Unit</u> This unit consists of an open flame device attached by a hose to a portable Liquefied Petroleum Gas bottle. The torch flame produces heat up to 2000 °F, which, when applied briefly to a growing weed, causes the plant's cells to burst killing it. The unit can be safely used in sand, decomposed granite, and mineral soil. We use it on pathways, table pads, and cracks in pavement, roads, sidewalks, etc.
- <u>Ceramic Infra-Weeder</u> The unit consists of a ceramic plate that is super heated by a LPG flame. It has the same effect as the propane torch, and destroys the weed by disrupting its cellular activity. The application rate takes at least twice as long as spraying herbicide. It works well on paving cracks, gravel and decomposed granite paths, playgrounds with sand fall zones, edges of irrigated lawn, etc. However, caution must be used to prevent fires.

- <u>Weed Fabric & Mulch</u> Staff continues to install weed fabric as time and funding permit. This application offers reliable weed control in smaller, confined areas that receive little traffic or public use. However, the scarcity of good, clean smelling mulch materials continues to be a problem. The mulch available at the transfer station has an offensive sour odor and cannot be used close to neighbors.
- <u>Mowing</u> Is an effective weed control method and will continue to be used where applicable.

Pilot Projects Implemented in 2004/2005

Parks tested a new product called Rode-trol to control rodents. The active ingredient in this bait product is corn oil concentrate. Its inert ingredients are wheat flour, molasses, and corncobs. The product is said to be "nearly non-toxic." We used the bait at Toro Canyon Park under controlled conditions. Twenty five pounds of the product was set out in bait stations over a 30 day period. The bait was placed in feeders during the time of year when food sources were scarce for the rodents, and they should have been attracted to it. However, little or none of the bait was consumed. We will continue to watch and search for new, less-toxic products to test.

New Projects for 2005/2006

In July of 2005, we will further reduce the use of pesticides by:

- Creating additional green parks where pesticides are not used at all. The new to be included are Rhoads, Thunderbird, and Calle Barquero developed open spaces.
- We plan to discontinue the use of herbicides in all South County Parks, Open Spaces, and County Grounds.
- Parks will set up a "PHAER Zone" notification information system at Waller County Park. The system entails the installation of information centers with color-coded maps of the park showing any park areas that receive chemical treatment. The goal is to provide park users with the information they need to decide where they want to recreate in the park.
- Parks will work with General Services planning staff to ensure that the landscapes around new County buildings are designed with integrated pest management strategies. Landscapes will be designed with non-chemical pest prevention techniques such as mulching, weed control fabrics, and the use of pest resistant plants.

County Parks is a member of the Regional IPM Coalition. This group makes it possible for diverse organizations to share IPM information, techniques, and innovations, and provides a forum to discuss emerging issues and problems, while seeking least toxic solutions to pest problems. Members are from City and County Government, local colleges, elementary and high schools, special districts, state agencies, community groups, manufacturers, and interested citizens.

As of July 1, 2005, County Parks will no longer maintain any parks or open spaces within the boundaries of the City of Goleta.

It is a priority in County Parks to look for effective, clean, safe, least-toxic methods to deal with our recurring pest management problems. Successful methods are implemented as budget, staffing resources, and opportunities permit.

Finally, as requested, tables 3 & 4, below, provide a brief comparison of the Integrated Pest Management Programs at Santa Barbara City Parks and Recreations and County Park's.

	S. B. County Parks	S. B. City Parks
IPM Program Implemented	2000	2004
Mission Statement	Promote environmentally sensitive pest management while protecting the health and safety of the public and our employees.	Promote environmentally sensitive pest management while protecting the health and safety of the public and our employees.
Coordination of programs	Grounds Management Committee Interdepartmental representatives & stakeholders coordinate, plan, review and update the IPM Program. Meets quarterly.	IPM Committee Interdepartmental representatives and two community representatives oversee and guide the IPM Program. Meets at least 4 times per year.
Reporting	Annually to the County Board of Supervisors.	Annually to the City Council or Park and Recreation Commission.
Pesticide Database	Department reports pesticide use to the Agricultural Commissioner's office, statute requirement.	Department maintains its own records to be used in the annual report.
On Site Herbicide Use Notification	Signs posted 2 days before application and 2 days after.	Signs posted 2 days before application and 3 days after.
Pesticide Use List	Listed in the Departmental Summary Report. Additional pesticides used only upon Grounds Management Committee approval.	Listed in an approved materials list. Exemptions possible through the IPM Committee.
Herbicide Free Zones	Within 50 feet of playgrounds Around picnic tables	Within 100 feet of playgrounds Within 25 feet of picnic facilities Within 25 feet of top of creek bank
Pesticide Free Parks	Lookout Park, Summerland Arroyo Burro Beach, S.B. Calle Barquero Open Space Rhoads Open Space	Alice Keck Park Chase Palm Park Shoreline Park Oak park

Integrated Pest Management Programs

	Thunderbird Open Space	Alameda park	
	S.B. Courthouse Sunken Garden	Douglas Family Preserve, &	
	Woof Pack Park, S.M.	9 neighborhood parks	
	Tech. Services Demonstration	This number is increasing over	
	Garden, S.M.	time.	
Herbicide Free parks	18 Open Spaces of the 2 nd		
	Supervisorial District		
	All of remaining South County		
	Parks and Open Spaces (July 1,		
	2005)		

PESTICIDE USE IN 2004 S. B. COUNTY and S. B. CITY

PESTICIDE Tier 1 – High concern, DANGER label			Santa Barbara County Parks <u>3,617</u> acres	Santa Barbara City Parks <u>1,800</u> acres
Quick Pro	Herbicide	gals.		0.2
Pestcon Fumitoxin	Rodenticide	lbs.	5.9	
Tier 2 – moderate concern, CAUTION label				
Rodeo	Herbicide	gals.		0.1
Dormant	Insecticide	gals.		0.8
Neem Oil	Fungicide	gals.		0.3
Round Up Pro	Herbicide	gals.	14.9	12.8
Surflan	Herbicide	gals.		2.5
Wasp Freeze	Insecticide	gal.		0.3

Wilco Gopher Bait	Rodenticide	lbs.	137.4	
Wilco Squirrel Bait	Rodenticide	lbs.	94.7	
Total		lbs.	238.0	
		gals.	14.9	17.0 gal.
Totals/acre		lbs.	.066 lbs/acre	
		gals.	.004 gal/acre	.009 gal/acre

Department:	Public Works - Flood Control
Contact Name:	Larry Fausett
Contact Extension:	x3437
IPM Coordinator:	Larry Fausett

IPM Strategy Activities

In response to the Board of Supervisors adopted **Integrated Pest Management Strategy** the following summarizes the Flood Control District's activities for the period, March 2004 to April 2005.

Staff participated in quarterly meetings of the Grounds Management Committee (GMC), and retained the same staff member as Pest Management Coordinator (PMC) to manage the District's IPM program. No new chemical controls or products were requested to be added to our use list. The District PMC also set up the annual training in IPM and worker safety for department staff last spring, and will do so again this spring. The District also sent staff to further Integrated Pest Management training.

The District routinely posts notices, in English and Spanish, 24 hours before an application of herbicide is to be made in all locations where these materials will be used. The notices remain in place for at least 24 hours after the application. (This has been a District practice since 1992).

<u>Mulch</u> - In the past year the District has used approximately 900 tons of wood chips and mulch in the weed control program. The Resource Recovery and Waste Management Division provides the wood chips and even delivered the material to the site (access road along Airport Channel in Santa Maria).

<u>Mechanical</u> – In place of herbicides, vegetation control has been augmented with mechanical mowing. The Flood Control District purchased a mower in November 2004 and over 270 acres of weeds along access ways have been mowed this spring.



The District has also researched alternative pest control pieces of equipment, products and techniques; an item that was listed under "Future Actions" in the Strategy adopted by the Board in 2000.

Santa Barbara County Water Resources Division Annual Pesticide Summary

The following table reports Flood Control's pesticide use between January 1, 2004 and December 31, 2004 and compares it with the prior year's usage.

Santa Barbara County Public Works Department/Flood Control District Annual Pesticide Use Summary						
Amount Amount Used 20012Amount not to 						
Glyphosate ¹	1233 gal.	986 gal.	452 gal.	789 gal.	256 gal.	174 gal.
Diuron	805 gals.	644 gals.	443 gals.	515 gals.	337 gals.	39 gal.
Telar	62 lbs.	50 lbs.	32 lbs.	40 lbs.	16 lbs.	3 gal.
Pendulum		No Baseline Use Established				13 gal.

Notes on the Table

1. Glyphosate is the active ingredient in both Round Up and Aqua Master (formerly Rodeo)

2. Amount used in 2001 is the basis for calculating reductions for the succeeding year.

3. 2001 base amount less 20%.

4. 2002 target less an additional 20%

It should be noted that the reduction in materials used from 2001 through 2004 is a result of several factors. There was a conscious effort to use less herbicide by using other weed control methods such as mulch, mechanical and hand removal.

In addition the District applied 43 pounds of Vectobac G to various facilities for mosquito control. This material was added to the use list in 2003 in anticipation of concerns about West Nile Virus by County residents. This material is an extremely specific pesticide. Its mode of action is such that it only prevents the larvae of mosquitoes and biting black flies from emerging as adults. It has no adverse effects on other aquatic organisms, either other invertebrates or vertebrates.

Pilot Project 2004 Results

One of the Flood Control District's pilot projects for 2004 was aimed at expanding the use of wood chip mulch to control weeds on access ways rather than applying a pre-emergent herbicide. In addition to continuing the application started in 2001 on an access area next to Sycamore Creek at Soledad Street, and an access road along a tributary to Devereux Creek in 2003 staff expanded the use of mulch last year to assist in controlling vegetation where it can be effectively used. District staff applied mulch to many access roads in the Santa Maria and Orcutt areas where the substrate is sandy. The problem identified at the Devereux site previously is that a very thick layer of mulch has to be laid down to prevent most of the weed growth. That thickness of mulch, on certain types of soil, where some District access roads are, can keep the

substrate so wet that it is likely that equipment would not be able to use the access road during the winter.

As noted in last year's report the weeds are not controlled as effectively using mulch as when the area is sprayed with an herbicide, however there are many areas where it is not necessary to have the control any more complete then what was achieved.

The use of mulch is more time consuming and thus is more costly because the mulch takes longer to apply initially and has to be reapplied. The cost estimates in last year's description of the project were accurate. The herbicide application on the Sycamore site costs about \$12 but the mulch cost about \$250 for the year, all in labor costs (the site is small so the mulch has to be spread by hand). Similarly the Devereux site cost about \$25 to spray (even though it is a much longer stretch) and about \$300 to mulch each time because a piece of equipment can be used to spread it. Thus the total cost to mulch the Devereux site is \$600 for the year because it had to be done twice last year.

Areas where mulch works in the Santa Maria and Orcutt have been found. Several areas have been mulched to minimize herbicide use, especially where the substrate is sandy and the problem of equipment getting stuck has not developed. Thus this is a useful weed abatement tool and has been used as appropriate.

In 2004 the District implemented another pilot project. The use of pre-emergent herbicide was discontinued on certain portions of the Santa Maria River Levee. Specifically, the District did not spray the lower levee road or the slope of the levee on the side away from the river. It has taken two winters to get enough growth of weeds to get to the point that vegetation control was required. The new mower, previously described, has very effectively controlled this vegetation. This project will be continued.

New Pilot Project for 2005

District staff will continue to review all of the sites that have been in the spray program in the past prior to any further application to insure that there is a clear necessity to continue treating those sites. It is possible that some sites can be removed from treatment and simply prepped mechanically if or when access is needed.

In addition the District will continue to monitor usage and work with the Grounds Management Committee and attend IPM training as time and the training budget allow continuing to search for alternative methods of weed control.

Department:	Public Works-Transportation Division, Road	Maintenance Section
Contact Name:	John McGray / Scott Roberts	
Contact Extension:	X3336 / X7773	
IPM Coordinator:	John McGray / Scott Roberts	

IPM Strategy Activities

In response to the Board of Supervisors adopted **Integrated Pest Management Strategy** the following summarizes the Road Maintenance Sections' activities for the period, January 1, 2004 to December 31, 2004.

Staff participated in quarterly meetings of the Grounds Management Committee (GMC), and retained the same staff member as Pest Management Coordinator (PMC) to manage the Division's IPM program. No new chemical controls or products were requested to be added to our use list.

The Maintenance Section trains approximately 25 employees annually as pesticide handlers, following the County's Ag Department's guidelines and training materials. One section employee is a Pest Control Advisor (PCA) and has a Qualified Applicator License (QAL) requiring 40 hours and 20 hours of continuing education credits respectively, and there is one other employee with a QAL.

Transportation Division Annual Pesticide Use Summary

The figures listed in Table 1 – Break down the Transportation Divisions use of pesticides to pounds of active ingredients, (i.e., 4lbs Glyphosate is contained in one gallon of Round Up). This method of comparison provides accurate quantification between liquid herbicides and dry herbicides.

During 1999 the Division used 1890.77 pounds of various chemicals to abate vegetation. Since that time, pesticide use for the Division has remained below that level due to changes in application strategies. The Division rarely, if at all, applied pesticide to the approximately 660 acres of roadway shoulder on which vegetation abatement is required. Vegetation on these locations is now abated with the use of mowers and when needed through manual means.

Beginning in 2000 the Transportation Division began, in earnest, the use of alternative methods in vegetation abatement. Both mechanical means and the use of wood chips have been employed, rather than the use of chemicals

When chemical means are used it occurs on the roadway pavement itself, prior to surface treatments. Weeds often begin to grow in the small cracks that occur in road pavement and it is necessary to remove these weeds prior to a surface treatment without further damaging the asphalt.

The significant reduction between 1999, and the following years indicates that the Transportation Division of Public Works is vitally interested in reducing the use of pesticides whenever possible.

Department:	General Services
Contact Name:	Paddy Langlands
Contact Extension:	x3096
IPM Coordinator:	Paddy Langlands

IPM Strategy Activities

In response to the Board of Supervisors adopted **Integrated Pest Management Strategy** the following summarizes the General Services Department's activities for the period, March 200 4 to April 2005

Staff participated in meetings of the Grounds Management Committee (GMC), and retained the same staff member as Pest Management Coordinator (PMC) to manage the departments IPM program.

The General Services Department contracts with Western Exterminator Services and Hydrex to provide pest services for County Facilities. Both are licensed, registered pest control companies that are aware and familiar with the County's IPM policy.

During the past year the two Vendors were instructed to use "Eco Exempt" formula's for pest control wherever possible. The formula's are "non reportable" and are non hazardous. This change has decreased the amount of hazardous chemicals used on County buildings.

Santa Barbara County General Services Department						
Annual Pesticide Use Summary						
Western - South County						
Chemical	UM	2003	2004	Difference		
Borid	lb	1.59	0.24	-1.35		
Maki Block lb 110.16 91.36 -18.8						
Terro Ant Killer II	oz	4.4	0	-4.4		
Dragnet SFR	Dragnet SFR oz 70.34 11.4 -58.94					
Suspend SC oz 0 0.56 0.56						
Talster CA Granular	lb	71.21	16.66	-54.55		

Talstar Lawn & Tree	oz	20.03	0	-20.03
Advance Ant Bait	oz	0	8	8
Glue Board	ea	45	0	-45
Western Rat Trap	ea	52	0	-52
Western Mice Trap	ea	26	54	28
Bell LP Rat Station	ea	9	0	-9
Cy-Kick	oz	0.25	19.08	18.83
Termidor SC	oz	3.01	11.39	8.38
Cynoff EC	oz	4.25	0.85	-3.4
CB-80 Insecticide	oz	9	0	9
Maxforce insect bait	oz	16	1	-15
PreEmpt cockroach	gr	3	0	-3
Echo Exempt	lb	0	15	15

*Negative numbers indicate pesticides with decreased use in 2004

Santa Barbara County General Services Department							
Annual Pesticide Use Summary							
Hydrex - North County							
Chemical	UM	2003	2004	Difference			
Talstar Granuals	lb	180.5	588	407.5			
Cy-Kick	oz	217	0	-217			
Tempo WP	oz	15	0	-15			
Delta Dust	oz	18	0	-18			
Suspend SC	oz	0	0	0			
PT - 565	oz	12	3	-9			
Maxforce insect bait	oz	4	2	-2			
Dragnet SFR	oz	34	16	-18			
Maki Black	lb	60.5	0	-60.05			
Demand CS	oz	80	54	-26			
Echo Exempt	lb	0	12	12			

*Negative numbers indicate pesticides with decreased use in 2004

On Going IPM in County Buildings General Service's staff will continue to respond quickly to any reported pest related issues to ensure they are treated appropriately and rapidly.