

Program # 40013 - Vector & Nuisance Control

Version 2/14/2005 s

Priority: Vibrant Communities

Lead Agency: Health Department

Program Offer Type: Existing Operating

Program Contact: WICKHAM Lila A

Related Programs:

Frameworks:

Executive Summary

Protects the livability, health and safety of our community by educating the public to prevent public health vector problems, controlling rodent and mosquito populations and enforcing nuisance codes. Program responds to neighborhood nuisances and emerging health issues including West Nile Virus. Utilized consensus-based community planning to establish West Nile Virus Response Plan.

Program Description

Vectors are animals or insects that transmit disease to humans. In Multnomah County, the most common vectors are rats and mosquitoes. This program focuses on community livability, health and safety using 1) Vector surveillance, community education and prevention and control measures to reduce vector populations to improve community livability and reduce risk of disease transmission. 2) Community Education: Educating residents about techniques to reduce mosquito breeding and rat-friendly environments around their property, using multi-lingual web-based resources, multi-lingual videos, earned media, interpreted group presentations and other methods. 3) Prevention and control to improve livability and reduce disease risk: An inch of water in a coffee can is capable of producing over 1,000 mosquitoes every 7 days. Mosquito control utilizes multiple strategies in addition to education; to disrupt mosquito breeding. It is critical to reduce the population and keep their ability to breed to a minimum, to maintain livable urban and rural outdoor recreation space and to prevent the spread of disease. In addition to community education to reduce rat-friendly environments, Rodent (rat) control selectively applies rodent pesticides to areas where rats are present, such as storm sewers. Rat populations should be kept to a minimum to prevent the risk of diseases such as Hantavirus and Plague spreading to humans. Nuisance Code enforcement activities work to eliminate any condition or practice that causes an unreasonable threat to the public health, safety, and welfare of our community. The code includes solid waste, illegal dumping, specified animals (e.g. livestock), and sanitation regulation and monitoring. This activity focuses on voluntary compliance as its primary approach.

Program Justification

This offer addresses the Vibrant Communities strategy to promote sustainable practices by utilizing an Integrated Pest Management plan based on best practices and multiple strategies to reduce reliance on broad spectrum pesticides, while contributing to a more pleasant environment for outdoor recreation opportunities. This work is enhanced through collaboration with agencies and others, including Oregon Zoo, METRO, Port of Portland, City of Portland and Oregon Golf Course Superintendents Association. This systematic approach in turn reduces residents' perceived need to use pesticides to control mosquitoes or rats in their living environment, and it gives them self-efficacy techniques to control those vectors. Code enforcement for issues like nuisance animals (e.g., crowing roosters) reduces negative interactions among neighbors. The program encourages meaningful, diverse community involvement, as evidenced by the West Nile Virus Task Force, that brought together a diverse group, including anti-pesticide advocates, property owners, infectious disease physicians, patients and an entomologist to develop a consensus recommendation for the Health Department West Nile Virus response. Mosquito control benefits essentially all residents of Multnomah County by controlling the population of mosquitoes that have flight ranges of up to 20 miles.

Performance Measures

(1) Rat infestation complaints: About 20% of total rat complaints (365 in 2004) are those of rats entering the home, usually through the sewer system. Vector Control responds immediately to the "rats in the toilet" complaint. (2) Mosquito larval and adult populations: Populations are sampled using standardized pre and post larvicide application measurements, as well as adult mosquito trap counts, species identification and testing for disease.

Summary of last year's program results and this year's expected results

Last Year: (1) Rat complaints declined from 1,232 in FY 01 to 365 in FY 04. This reflects control efforts that include City of PDX/Multnomah County coordination of sewer line repairs with rodent control. (2) 5,161 acres of mosquito-breeding water and 9,564 sedimentation manholes were larvicide-treated. Standardized pre/post-application "mosquito larval dips" demonstrate a decrease from 1-50 larvae per dip (depending on water body) to an average of less than 1 larvae per dip. Mosquito larvae treatment translates to an estimated 12,000,000,000 fewer adult mosquitoes/year in Multnomah County. This years results are expected to be similar to FY04.

Program Mandate: 2 Mandated Program with Funding/Service Level Choice

Legal mandates are ORS 452, 167, and 634; OAR 635-7 and 603-57; 1968 Agreement City of Portland and Multnomah County – Title 13 and Title 8; Contracted mandates include 14 federal, regional and local government commitments (+300K).

Revenue/Expense Detail

| | Proposed General Fund | Proposed Other Funds | Proposed General Fund | Proposed Other Funds |
|---------------------------|-----------------------|----------------------|-----------------------|----------------------|
| Program Expenses | 2005 | 2005 | 2006 | 2006 |
| Personnel | \$618,673 | \$0 | \$708,603 | \$13,952 |
| Contracts | \$63,850 | \$0 | \$71,820 | \$0 |
| Materials & Supplies | \$127,375 | \$0 | \$167,047 | \$0 |
| Internal Services | \$132,704 | \$0 | \$235,771 | \$1,048 |
| Capital Outlay | \$22,000 | \$0 | \$0 | \$0 |
| Subtotal: Direct Exps: | \$964,602 | \$0 | \$1,183,241 | \$15,000 |
| Administration | \$0 | \$0 | \$19,765 | \$0 |
| Program Support | \$0 | \$0 | \$61,375 | \$25,138 |
| Subtotal: Other Exps: | \$0 | \$0 | \$81,140 | \$25,138 |
| Total GF/non-GF: | \$964,602 | \$0 | \$1,264,381 | \$40,138 |
| Program Total: | \$964,602 | | \$1,304,519 | |
| Program FTE | 0.00 | 0.00 | 9.83 | 0.12 |
| Program Revenues | | | | |
| Indirect for dep't Admin | \$0 | \$0 | \$957 | \$0 |
| Fees, Permits & Charges | \$1,500 | \$0 | \$1,000 | \$0 |
| Intergovernmental | \$309,700 | \$0 | \$293,290 | \$15,000 |
| Other / Miscellaneous | \$45,200 | \$0 | \$45,200 | \$0 |
| Program Revenue for Admin | \$0 | \$0 | \$48,585 | \$25,138 |
| Total Revenue: | \$356,400 | \$0 | \$389,032 | \$40,138 |

Explanation of Revenues

Approximately 1/3 of the services are supported by fee and fine revenue.

Significant Program Changes

In FY06 more resources will be put into Catch Basin Mosquito Control, which includes surveillance work in catch basins/storm water structures for Multnomah County School District, City of Gresham, and Portland Parks and Recreation to reduce risk of mosquito-borne disease such as West Nile virus.