

**Lead Agency:** Health Department

**Program Contact:** WIRTH Chris M

**Program Offer Type:** Existing Operating

**Related Programs:**

**Program Characteristics:** Climate Action Plan

**Executive Summary**

Program protects the public from emerging and imminent vector-borne diseases and reduces the social/economic impact of uncontained outbreaks. Vector-borne diseases are transmitted from animal to humans. The major emerging diseases are vector borne (WNV, avian influenza, SARS). Current analysis of evidence shows that environmental indicators such as dead birds predict the prevalence of human cases of West Nile virus in a community. Although no positive cases of WNV occurred in Multnomah County in 2010, climate changes in the NW, such as warming winter temperatures, increase in rainfall, and urban landscape management will increase the risk of vector-borne diseases. Intervention strategies include surveillance, analysis, proactive control/abatement of rodent and mosquito populations and public education. Program includes enforcement of nuisance codes. The program solicits input from a Commissioner-appointed Citizen Advisory Committee.

**Program Description**

**Objectives:** Collection and identification of mosquitoes, birds and rats. Monitor for and respond to emerging vector borne disease such as H1N1 and West Nile Virus. Perform laboratory analysis on rats and mosquitoes to determine which species carry disease, their preferred habitats and population size. Abate and or suppress mosquitoes that carry West Nile Virus with pesticides with the least impact, reduce the population by water control and vegetation management to reduce breeding habitat. Educate the average citizen and vulnerable people about preventing vectors and their habitat through community meetings, pamphlets and the media. **COMPONENTS:** Mosquito Control – majority of funds/staffing. Rodent Control - primary service provider for rodent control countywide. Nuisance Code Enforcement – addresses public health code violations, esp. restaurant enforcement, dumping and harboring unspecified animals (e.g., bees, livestock, and birds). Multnomah County (MC) climate supports an ideal mosquito and rat habitat. International airport and shipping along with migratory bird flyways provide avenues for new diseases to enter the community. Mosquito control began in MC in the 1930's when malaria was endemic. Although no WNV cases occurred in MC in 2010, two counties in Oregon reported three cases of infected mosquitoes. It is necessary to maintain current levels of surveillance and control to ensure early prevention and suppression of this disease using World Health Organization and Center for Disease Control best practices. Rodent control is critical to public health. Rodents can spread Hantavirus, plague and other diseases and can affect livability. A current survey in the MC rat population is showing Toxoplasmosis (Cat Box Fever) in 6% of the rat population. Vector control protects the community by serving all populations, while focusing on the vulnerable (i.e. elderly, children, homeless). The citizenry understands and expects these program functions.

This program offer supports the climate action plan for work done in surveying mosquito populations for emerging vector-borne diseases that are related to changes in our climate. Vector Control is able to minimally support adaptation assessment and planning as a key stakeholder. Action items: 17-1, 17-2, 17-3.

**Performance Measures**

Measure Type	Primary Measure	Previous Year Actual (FY09-10)	Current Year Purchased (FY10-11)	Current Year Estimate (FY10-11)	Next Year Offer (FY11-12)
Output	Number of acres treated for mosquitoes	4,216	3,500	4,000	4,000
Outcome	Mosquitoes prevented (In millions)	2,108	1,750	2,000	2,000
Efficiency	Number of acres treated for mosquitoes per FTE	843	700	800	800
Output	Number of rodent inspections conducted	914	905	925	925

**Performance Measure - Description**

Output: Total acreage where mosquito suppression activities occurred and is subject to variance in weather patterns, seasonal flooding, characteristics, presence/absence of disease.

Outcome: Based on industry standard estimate methodology: 500,000 mosquitoes per surface acre of water X number of acres treated estimates mosquitoes prevented (to nearest whole number).

Efficiency: Total acreage treated per one FTE.

Output: On-site inspections stemming from rodent complaints (i.e. rat in toilet received. Measures were refined to reflect industry standards.

## Legal/Contractual Obligation

Legal mandates are ORS 167, 452, 498, 506, and 634; OAR 635 and 603; 1968 Agreement City of Portland and Multnomah County – Title 13 and Title 8; 7 contractual mandates include grants, contracts, Federal, regional and local mandates.

## Revenue/Expense Detail

	Proposed General Fund	Proposed Other Funds	Proposed General Fund	Proposed Other Funds
<b>Program Expenses</b>	2011	2011	2012	2012
Personnel	\$912,590	\$0	\$945,832	\$0
Contracts	\$73,150	\$0	\$66,350	\$0
Materials & Supplies	\$86,663	\$11,097	\$112,712	\$11,004
Internal Services	\$189,035	\$903	\$193,413	\$996
<b>Total GF/non-GF:</b>	<b>\$1,261,438</b>	<b>\$12,000</b>	<b>\$1,318,307</b>	<b>\$12,000</b>
<b>Program Total:</b>	<b>\$1,273,438</b>		<b>\$1,330,307</b>	
Program FTE	10.65	0.00	10.65	0.00
<b>Program Revenues</b>				
Indirect for dep't Admin	\$714	\$0	\$717	\$0
Fees, Permits & Charges	\$2,500	\$0	\$500	\$0
Intergovernmental	\$236,666	\$12,000	\$235,166	\$12,000
Other / Miscellaneous	\$1,000	\$0	\$1,000	\$0
<b>Total Revenue:</b>	<b>\$240,880</b>	<b>\$12,000</b>	<b>\$237,383</b>	<b>\$12,000</b>

## Explanation of Revenues

Vector-borne Disease Prevention and Code Enforcement is funded by county general fund and with revenue from intergovernmental agreements with City of Portland and other local and state jurisdictions that is recognized in the general fund. The program also receives a federal grant through the state of Oregon for West Nile Virus.

County General Fund: \$1,081,641  
City of Portland Bureau of Environmental Services: \$224,000  
Oregon Zoo: \$5,000  
Oregon Department of Transportation: \$2,500  
City of Durham: \$2,166  
City of Maywood Park: \$1,500  
Fees from fines and permits: \$1,500  
West Nile Virus federal grant: \$ 12,000

## Significant Program Changes

**Last year this program was:** #40008, Vector-borne Disease Prevention and Code Enforcement