

Priority: Basic Needs
Program Offer Type: New Program
Related Programs:

Lead Agency: Health Department
Program Contact: WICKHAM Lila A

Program Characteristics: One-Time-Only Request

Executive Summary

This one-time-only research request will assist Vector Control to more precisely target its disease prevention and control efforts to mosquitoes that can carry human diseases such as St. Louis encephalitis and West Nile virus. This project is part of a recommendation by the appointed Vector and Code Enforcement Advisory Committee to address assessed critical gaps of the Vector Program on evaluating potential impacts of services.

Program Description

This one-time-only research project will use current DNA technologies to more clearly understand what animals, including humans, certain mosquitoes found in Multnomah County prefer to feed on.

The project will collect samples of fed, female mosquitoes of indigenous Culex and Culiseta species and analyze them to determine which animals they have fed upon to:

- Increase knowledge of local Culex and Culiseta mosquito species feeding preference.
- More accurately assess risk of locally acquired mosquito-borne disease.
- Focus prevention efforts to specifically target those species which will more likely transmit communicable diseases to humans.
- Reduce and or streamline pesticide applications by focusing on those species.

The one-time request will cover travel and training, laboratory testing, supplies, and field labor costs for the project. This request will also cover the costs for three vector control staff to attend the 2007 American Mosquito Control Conference where they will receive critical training and have the opportunity to make necessary professional connections that will enhance the quality and outcomes of the research project

Program Justification

The project will improve the health of the community and the environment by addressing the strategy to prevent and control disease by tailoring mosquito source reduction and control methods including education and chemical treatment efforts to reduce the risk of the community being exposed to and acquiring mosquito borne diseases.

Performance Measures

Measure Type	Primary Measure	Previous Year Actual (FY04-05)	Current Year Purchased (FY05-06)	Current Year Estimate (FY05-06)	Next Year Offer (FY06-07)
Output	Number of mosquitos analyzed	0	0	0	60,000
Outcome	No. mosquitos species biting humans & potentially disease-carrying host animals	0	0	0	11

Performance Measure - Description

Output: All mosquitoes captured will be analyzed for species and blood meal preference, as well as breeding habitat, population size estimates disease carrying capacity. These factors may vary due to seasonal fluctuations in the breeding environment (e.g. temperature, extent and duration of flooding).

Outcome: There are 11 out of 21 species, in our region, estimated capable of disease transmission based on current literature.

Legal/Contractual Obligation

Revenue/Expense Detail

	Proposed General Fund	Proposed Other Funds	Proposed General Fund	Proposed Other Funds
Program Expenses	2006	2006	2007	2007
Personnel	\$0	\$0	\$14,530	\$0
Contracts	\$0	\$0	\$5,670	\$0
Materials & Supplies	\$0	\$0	\$1,800	\$0
Subtotal: Direct Exps:	\$0	\$0	\$22,000	\$0
Administration	\$0	\$0	\$0	\$0
Program Support	\$0	\$0	\$0	\$0
Subtotal: Other Exps:	\$0	\$0	\$0	\$0
Total GF/non-GF:	\$0	\$0	\$22,000	\$0
Program Total:	\$0		\$22,000	
Program FTE	0.00	0.00	0.00	0.00
Program Revenues				
Program Revenue for Admin	\$0	\$0	\$0	\$0
Total Revenue:	\$0	\$0	\$0	\$0

Explanation of Revenues

Significant Program Changes

Last year this program was: