



REGIONAL DISTRICT NORTH OKANAGAN

MEMBER MUNICIPALITIES:

CITY OF ARMSTRONG

CITY OF ENDERBY

DISTRICT OF COLDSTREAM

VILLAGE OF LUMBY

CITY OF VERNON

TOWNSHIP OF SPALLUMCHEEN

ELECTORAL AREAS:

"B" – SWAN LAKE

"C" – BX DISTRICT

"D" – LUMBY (RURAL)

"E" – CHERRYVILLE

"F" – ENDERBY (RURAL)

FREQUENTLY ASKED QUESTIONS – Electoral Area “F” Mosquito Control

Background

Electoral Area “F” wishes to provide a mosquito control service to the residents of Electoral Area “F”, with a focus on mosquito breeding sites along the Shuswap River near the communities of Kingfisher, Ashton Creek, Grindrod and Mara.

Electoral Area “F” COVID-19 Safe Restart Grant funding in the amount of \$18,000 was allocated to the development of a pest management plan (PMP) by Duka Environmental Services Ltd. The purpose of the PMP is to reduce overall mosquito annoyance by controlling larval development. The proposed duration of the PMP is April 2024 to March 2029.

The intent of the program identified through the PMP is for a contractor to apply the biological controls outlined in the PMP to mosquito larval habitats within areas of the Shuswap River floodplain, beginning in 2024 to help prevent the spread of mosquitoes.

Why is a mosquito program proposed?

The goal of the mosquito surveillance and control program is to provide residents, workers and visitors to the RDNO relief from widespread, extreme, or persistent adult mosquito nuisance and reduction of potential disease vectors.

In addition to negative impacts on the lifestyle and general health of residents, a large population of mosquitoes can have a negative economic impact on local businesses. Worker safety, comfort and efficiency can be compromised by adult mosquito annoyance and distraction. Milk, beef, and egg production in farming or ranching communities can be reduced when animals are unable to feed or rest because of extreme mosquito annoyance or through a reaction to mosquito saliva-borne toxins or disease. Reduced use and enjoyment of rented accommodations and restaurant outdoor patios, sports fields, golf courses, campgrounds and cycling or hiking trails by residents and area visitors, directly affects business operations and revenues.

Although not a common occurrence in most areas of British Columbia, mosquitoes are capable of transmitting (vectoring) diseases. An effective, pro-active mosquito control program which focuses on the identification, prevention and timely control of larval mosquito populations is important to limit the potential for both disease transmission and widespread adult mosquito annoyance.

How does the RDNO plan on controlling mosquitoes?

A [Pest Management Plan](#) has been recently drafted, recommending an Integrated Pest Management (IPM) approach to control. This approach focuses on the timely detection and treatment of larval mosquito populations using biological products and methodologies. Where possible, and appropriate, physical or cultural controls are recommended to reduce larval habitat and enhance or conserve natural mosquito predators and their environments. Where required, larval mosquito populations would be controlled using a bio-rational larvicide product, containing *Bacillus thuringiensis* var. *israelensis*. All treatments would be completed in accordance with the BC *Integrated Pest Management Act and Regulations*.

The control program is not intended to, nor is it possible, to eradicate local mosquito populations. Despite the best of efforts, some adult mosquito annoyance may still occur during the summer months.

Is spraying bad for the environment and what exactly is sprayed?

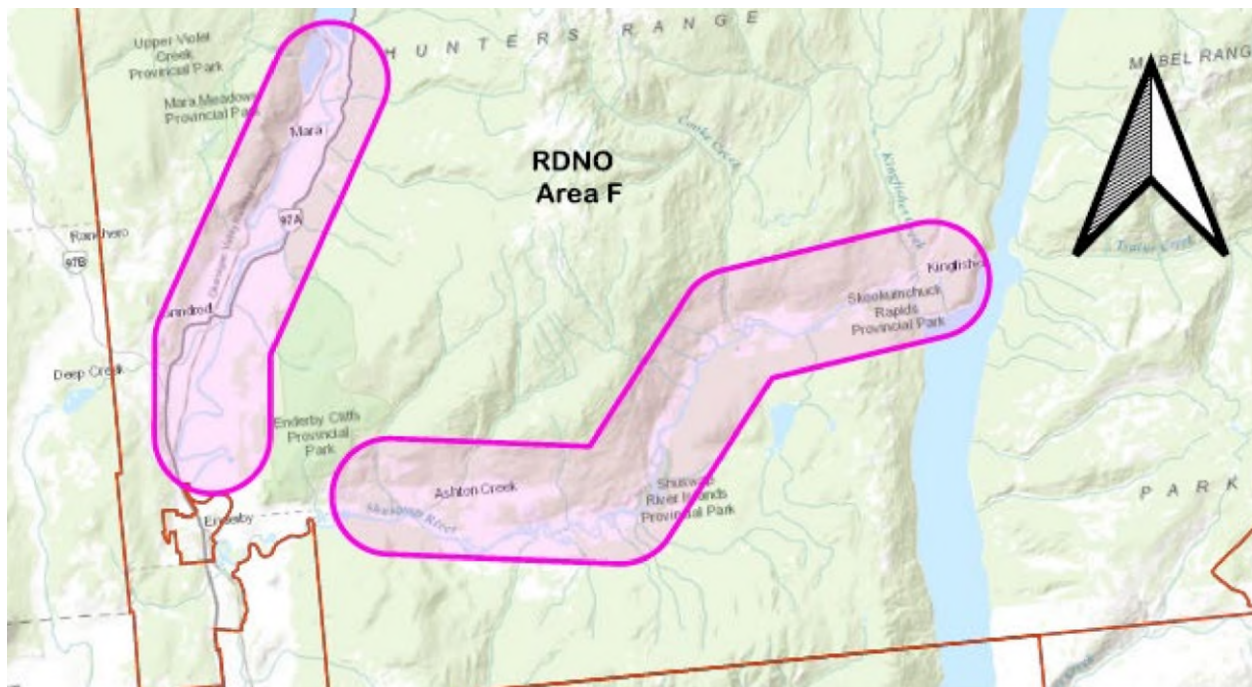
This program will not include the use of sprayed pesticides. The biological control product is deployed in a granular form which targets larval development in standing water. Granules may be dropped from the air or deployed from the ground by field personnel.

Unlike sprays of broad-spectrum insecticides, which may have negative impacts on non-target insects or other organisms, the biological product to be employed has been found to have minimal impact on other organisms that might be present in mosquito larval development sites:

<https://www.csr.d.bc.ca/ArchiveCenter/ViewFile/Item/637>

Where will the treatment occur?

The geographical area covered under the PMP is coarsely defined as the communities of Grindrod, Mara Lake, Kingfisher (Mabel Lake), and adjacent areas, within the Regional District of North Okanagan Electoral Area "F" (see Figure below). Larval mosquito habitats affecting the areas include impounded waterbodies such as temporary and permanent ponds, swamps and low-lying river flood and seepage-water influenced habitats in forested areas, farm fields, ranch lands and undeveloped areas. Filling with water in response to snowmelt, precipitation run-off and increased river levels, shallow pools and ponds can form in depressions, sloughs, back channels and old river oxbows located all along the Shuswap River. Additional larval development habitats include roadside ditches and temporary sites such as water-filled tire ruts, depressions, un-used or abandoned pools or boats, canoes and containers. Many of these sites can become active with larval development on more than one occasion during the months of April through August, depending on weather conditions.



Will treatment happen on private lands/can I request it on my property?

Mosquito control services would be provided to residential and rural property owners, businesses, municipal and regional parks, sports fields, golf courses and other outdoor recreational and tourist facilities located within the specified areas of the RDNO.

If elector assent is received and the service established, landowners will have the opportunity to provide permission for a property to be treated by filling out a form on the [mosquito information webpage](#).

Property owners would be consulted prior to any larvicide applications and for any recommended physical or biological/natural methods. Product brochures, labels, Material Safety Data Sheets and website

addresses would be supplied and reviewed to ensure residents, business, and facility operators understand, are comfortable with, and approve, proposed treatments.

What if I don't wish to have my property treated?

In the event that a property owner wishes exclusion from the control program this request would be honoured and noted in the development site database.

Will the treatment of larval mosquitoes reduce annoyance in the whole service area or only be effective on adjacent areas?

The areas proposed for treatment have been identified as they appear to be prime mosquito development habitats, with persistent or recurring standing water occurring on an annual basis. This will be confirmed through on-going monitoring. Many of these areas are also close to more populated communities in Electoral Area "F". There may also be benefits to areas adjacent to, but outside of treated areas, as the control of larval populations within the service area will reduce the adult mosquito population available for dispersion by active flight or winds.

Why is the RDNO seeking the approval of the electors for this initiative?

As a Regional District, the RDNO does not have funds available for the purposes of establishing new services and the RDNO must seek approval of the electors now through an Assent Voting (referendum) process.

Who will pay?

If adopted, the contributors within the service area (Electoral Area "F") are the ones to pay through taxation.

What will the annual tax impact be for the average residential property?

The requisition limit for Bylaw No. 2973 is proposed at the greater of \$289,000 or \$0.17 per \$1,000 of net taxable land and improvements. Based on an average residential assessment of approximately \$591,000 in 2023 and the maximum tax requisition, the average residential tax impact will be approximately \$99.95 per year, starting in 2024.

More Information on the Assent Voting (referendum) process

Further information regarding the Assent Voting (referendum) process including where, when, how to vote, elector qualifications and more is available on our website at www.rdno.ca or by phone 250.550.3700 / 1-855-650-3700 toll free.