RDOS Area "D" Service & Boundary Study
Fact Sheets
November 2021

ENVIRONMENTAL SERVICES

➢ What services are provided?

Environmental services within the RDOS include the following services:

- **Destruction of Pests (formerly Noxious Insect Control) Program** – this service includes monitoring, verification of infestations and public education to ensure bylaw compliance for the control of noxious insects (fruit tree pests) delivered to the City of Penticton, District of Summerland, Town of Oliver, Village of Keremeos and all but 1 electoral area (Area "H") within the RDOS. The program focuses on pests not addressed by the Sterile Insect Release Program (outlined later in this section), such as the Western Cherry Fruit Fly, Spotted Wing Drosophilia, Clear Wing Moth and Fire Blight. The goal of the program is to educate individuals that are considering planting a fruit bearing tree or shrub, or already have plantings, about their responsibility to care for their fruit trees and prevent or control destructive pests.

- **Mosquito Control Program** – this service consists of site monitoring of approximately 375 – 425 properties from March to September each year for mosquito larva in all Electoral Areas except Area "E" as well as in Osoyoos, Oliver, Penticton, and Summerland. Regional District technicians check stagnant (still) water bodies for mosquito larvae as well as for the predators that eat the larvae. Once each larval/predator monitoring is complete, non-toxic organic larvicide is applied where required.

- **Invasive Species Program** (formerly noxious weeds) – this service involves the removal of both land-based and aquatic invasive plant species, as well as prevention, education and public relations related to invasive species, delivered on a region-wide basis.

- **Environmental Conservation Service** – this service was created in 2016 to promote protection of natural areas, habitat, water, the environment and wildlife. Participating areas include Electoral Areas "A", "C", "D", "E", "F", and "I" as well as the municipalities of Penticton, Summerland and Oliver. The service administers a Conservation Fund that provides financial support for projects that will contribute to the conservation of the region's valuable natural areas. The intent is to provide funding for conservation projects that are not the existing responsibility of the federal, provincial or local governments.

The RDOS also participates in and contributes to two related pest control partnership programs that are delivered on a multi-regional basis:

- **Nuisance (Starling) Control Program** – this service consists of a starling control (juvenile trapping) program for the protection of agriculture and native bird species. The program is delivered in partnership with the BC Fruit Growers' Association, the BC Cherry Association, BC Grapegrowers Association, Okanagan Tree Fruits Cooperative, the Regional District of Central Okanagan (RDCO) and the Regional District of North Okanagan (RDNO).

- **Okanagan-Kootenay Sterile Insect Release Program** – this service exists to protect tree fruit from the codling moth population and includes monitoring, education, enforcement and population control measures (sterile moth

release, mating disruption, blossom/fruit removal, cardboard banding and/or pesticide application) in partnership with the RDCO, RDNO, Columbia Shuswap Regional District (CSRD) and growers throughout participating regions. All of the RDOS participates in the program except for Area "H", the Town of Princeton and a portion of Area "I."

➢ Who delivers the service?

The Destruction of Pests and Mosquito Control programs are delivered on a seasonal basis to the participating electoral areas and member municipalities by the RDOS Engineering Services department. The Destruction of Pests program updated all of the educational materials and prepared information videos in 2021 to aid in the program delivery. The Mosquito Control Program employs 2 seasonal labourers who carry out all of the monitoring and treatment of the identified sites. The delivery of the Invasive Plant Species is contracted out to the Okanagan and Similkameen Invasive Species Society.

The Environmental Conservation service is delivered by RDOS, but is supported by contracted administrative management support, as well as a Technical Advisory Committee appointed by the RDOS Board that provides expertise in the review and recommendation of projects and recipients of the Environmental Conservation Fund.

The Nuisance Starling Control program is funded jointly by the program partners, and is overseen by a Management Committee that includes representatives from the RDOS, BC Fruit Growers' Association, the BC Cherry Association, the BC Grapegrowers' Association, BC Ministry of Agriculture, landowners whose properties are typically used for trapping and an environmental/naturalist club representative. The program is delivered on a year-round basis through the BC Grapegrowers' Association, which administers the program on behalf of the program partners. Trapping is carried out by a team of professional contracted trappers throughout the three Okanagan Regional Districts - RDOS, RDNO, and RDCO.

The Okanagan-Kootenay Sterile Insect Release (OKSIR) program was established in 1992 as an independent corporation. The program employs and is delivered by a General Manager along with approximately 16 full-time staff and 70 seasonal staff. SIR offices are located in Kelowna, Penticton, Vernon and Osoyoos.

➢ Who makes decisions?

Operational decisions related to the programs delivered by the RDOS (Noxious Insect Control, Mosquito Control, Invasive Plant and Environmental Conservation programs) are made by the RDOS directors representing the participating areas with input from the Manager of Engineering Services and Chief Administrative Officer. Decisions regarding budget matters, the financial plan, regulatory bylaws or borrowing are made by the full Board of Directors.

All matters related to the Nuisance Starling Control program are considered by the Management Committee, and any recommendations are referred to the BC Grapegrowers Association's Board of Directors for decision. The RDOS has 1 representative on the Management Committee. The total number of committee members fluctuates depending on the number of participating landowners.

The OKSIR Board of Directors is the chief governing body for the SIR program. All key decisions related to the program are made by the board. The Board has eight voting and two non-voting members. The voting members are regional district directors (or alternates) appointed by the participating regional districts, and three grower representatives (one of whom is a certified organic grower). The two non-voting members are senior government representatives from Agriculture and Agri-Food Canada and the other from the BC Ministry of Agriculture. Only the five regional district directors vote on financial matters.

➢ What is spent by RDOS on the services?

The total cost of the environmental services that impact Area "D" are shown in Figure 1. The

Figure 1
Cost of Services
2021

Service	Cost[1]
Destruction of Pests	$9,959
Mosquito Control Program	$202,695
Invasive Species Program	$76,033
Environmental Conservation	$461,570
Nuisance Starling Control Program	$25,750
OK Sterile Insect Release Program	$877,587

1 Cost estimates are from adopted 2021 budget figures

amounts shown represent the total cost of these services, and not the portion that Area "D"

residences pay for through taxes. In addition to the service costs, there are also operating and capital reserve accounts created for future expenditures. Reserve totals are included in Figure 2

Figure 2
Reserve Totals
2020

Service	Reserve Total[1]
Destruction of Pests Operating[2]	$9,334
Mosquito Control - Capital	$5,156
Mosquito Control - Operating	$52,555
Invasive Species Operating	$8,380
Environmental Conservation Operating	$518,901

1 Reserve totals are as at the end of 2020.

2 Reserve is for areas participating in the program. A separate operating reserve exists for pest control bylaw enforcement in Summerland only ($7,307).

➢ How are the costs recovered?

Destruction of Pests – the costs of this program are recovered primarily through property taxes in the participating rural areas (levied on assessed values for land and improvements). Contract revenue from participating municipalities pays for the services within municipalities.

Mosquito Control – costs for this program are recovered through a tax requisition, and on transfers from operating reserves as needed. The amount to be recovered from tax requisition is apportioned to each participating area based on a three-year average of how much time was spent by staff in each jurisdiction over the season. Once allocated to each jurisdiction, that amount is raised through property taxes levied on assessed values for improvements only.

Invasive Species Program – the costs of this region-wide service are shared by all jurisdictions within the RDOS, and recovered through property tax requisition (levied on assessed values for land and improvements).

Environmental Conservation – the funds for this service are raised through tax requisition, levied on assessed values in the participating jurisdictions.

Nuisance Starling Control Program - the RDOS participates on a region-wide basis and contributes approximately $25,000 annually towards this program, the costs of which are raised through property taxes levied on assessed values for land and improvements.

Sterile Insect Release Program – the costs of this program are raised through a combination of property taxes and parcel taxes in the participating areas. General taxpayers (including growers) pay property taxes on the basis of the assessed value of their land only (i.e. not improvements), and orchard growers pay through parcel taxes levied on a per acre basis. In 2021 grower parcel taxes paid for approximately 37% of the overall SIR program costs.

➢ What is the cost to the typical resident?

The combined tax impact on residents within Area "D" for the collection of environmental services is shown in Figure 3. The amount owing is based on a home valued at $450,000, of which 50% of that assessed value represents the value of the improvements, or structures, and 50% represents the value of the land.

In addition, under the SIR program, each parcel of property that is 0.3 acre or greater in size with 20 or more codling moth host trees (apple, pear, crabapple and/or quince) are also levied a parcel

tax. In 2021, the parcel tax was set at $139.26 per planted acre. All properties that are levied a SIR parcel tax are assessed for a minimum of 1 acre. This tax only applies to those growers, so in Figure 3 the per acre amount is shown, but not added into the total.

Figure 3
Cost Impact on Typical Residence
2021

Service	Tax Req.[1]	Res. Rate	Owing[2]
Destruction of Pests	$1,194	0.0009	$0.41
Mosquito Control[3]	$6,397	0.0080	$1.80
Invasive Plant Control	$3,291	0.0024	$1.08
Environmental Conservation	$23,415	0.0173	$7.79
Starling Control	$1,388	0.0010	$0.45
OK Sterile Insect Release[3]	$409,002	0.0396	$8.91
OK SIR Parcel Tax[4]	$478,660	$139.26	
Total			**$20.43**

1 Tax requisition amount excludes 5.25% Surveyor of Taxes fee

2 Impact is calculated on a home assessed at $450,000

3 Mosquito Control is only calculated on improvements, and SIR is only on land. Assumed the $450,000 property is 50% improvemnts, 50% land

4 OK SIR parcel tax is only levied on orchard growers, at a rate of $139.26 per acre. is only on land. Assumed the $450,000 property is 50% improvemnts, 50% land

➢ What impact would incorporation have on these services?

Incorporation is not expected to have a significant impact on any of the environmental services referenced in this Fact Sheet. The services are all delivered to a combination of municipalities and electoral areas; it is reasonable to assume this would continue to be the case even after incorporation. The services themselves, and the costs, are not expected to change as a result of incorporation.

The amounts allocated to individual jurisdictions may vary – for instance the Mosquito Control allocation is based on the time spent in each jurisdiction. Depending on the boundary created for a new municipality, and the mosquito issues within it, the amount would fluctuate accordingly.

The primary impact of incorporation on these services is therefore governance, rather than any direct change to the service, service level, or service cost. Once incorporated, a municipal council would have authority to determine whether to participate in (or withdraw from), the various regional environmental services. A municipal council member would represent the municipality as a director on the RDOS Board, and the municipal director would participate in discussions and decisions regarding regional services in which the municipality participates