

# Japanese Beetle Technical Briefing Session for Landscape Industry: **Update on Treatment in the JB Program**

June 21, 2023

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# Acknowledgement:

The Japanese Beetle Eradication Program is funded and staffed through a partnership of agencies:

City of Burnaby, 2021

City of Port Coquitlam, 2021

City of Richmond, 2022



*No agency held all the tools needed - collaboration was key to success.*

# Goal of the Program is to: Eradicate Japanese Beetle from BC

*More effort now will hopefully  
prevent establishment and spread of the  
pest, and  
any ongoing more expensive efforts in the  
future.*



# Results so far

**97.5% decrease in number of beetles caught in traps  
2018-2022**

See CFIA's survey reports located here for more details.

<https://inspection.canada.ca/plant-health/invasive-species/insects/japanese-beetle/survey-repor>

[ts/eng/1547837775239/1547837775535#2021](https://inspection.canada.ca/plant-health/invasive-species/insects/japanese-beetle/survey-reports/eng/1547837775239/1547837775535#2021)

**Indicates that the Treatment and other initiatives are working!!**



# How do we measure treatment success?

Application in 2022



Trap catches in 2023 will show us if the 2022 treatments were successful = decreased beetle numbers in the area

# 2023 Roll out:

- Determine treatment areas based on trap catches in 2022.
- Notice to Treat was issued to the cities of
- Vancouver,
- Burnaby,
- Port Coquitlam, and
- Richmond
- on February 6, 2023 from the Province
- Treatments to turf on public land began in April



## NOTICE OF REQUIREMENT TO TREAT

February 6, 2023

To: City of Burnaby, c/o Leon Gous, CAO

CC: Tracey Tobin, and Melinda Yong

Based on the 2022 Canadian Food Inspection Agency Survey for *Popillia japonica* (Japanese Beetle, JB) in Burnaby, British Columbia, I have reasonable grounds to believe that part of Burnaby is infested or could be infested with *P. japonica*, a regulated pest. Therefore, pursuant to the Japanese Beetle Control Regulation (B.C. Reg 77/2019) [http://www.bclaws.ca/civix/document/id/crbc/crbc/77\\_2019](http://www.bclaws.ca/civix/document/id/crbc/crbc/77_2019), authorized under the *British Columbia Plant Protection Act*, the city of Burnaby is hereby required to treat the locations described below in accordance with the treatment specified herein, and are hereby required to complete all treatments between April 1 and October 15, 2023, when soil moisture and temperature conditions are suitable.

**LOCATION OF THE PLACE OR THINGS:** Located at: Burnaby, British Columbia

### DESCRIPTION OF THE PLACE OR THINGS:

- 1) Turfed areas of boulevards, medians, parks, and other turfed areas under the jurisdiction of the city of Burnaby within the treatment area as outlined in solid pink lines depicted on the attached "Treatment Area" map. If a property is intersected by the boundary of the Treatment Area, treatment can occur to the next natural boundary or the property line.
- 2) Landscape beds within 5-10 m around each positive trap location where *P. japonica* beetles have been caught or have been observed.



March 13, 2023

**Attn: Landowners and Property Managers in Port Coquitlam**

**Re: Request to treat turf areas and high-risk landscape beds for *Popillia japonica*, Japanese Beetle**

*Popillia japonica* (Japanese beetle) is a regulated, invasive pest that was first detected in B.C. in Vancouver in 2017. The larvae feeds on turfgrass roots, killing the plants. The adult beetle feeds on the foliage of over 300 species of plants and can cause extensive defoliation. This species presents a significant risk to lawns, parks, green space and farms. Since 2018, a coordinated effort to eradicate *P. japonica* from neighbourhoods it has been discovered in has led to a 98% decrease in *P. Japonica* numbers. While this a significant success, unfortunately *P. japonica* beetles have now been discovered in Port Coquitlam and we are asking for your help to support our response.

The British Columbia Ministry of Agriculture and Food is leading the effort to eradicate *P. japonica* because of the potential harm it poses to natural, urban and farm environments, and the impact that could have on communities and the economy. Larvicidal treatment of turf grass to target *P. japonica* in the larvae stage is the recommended method of control and one that has led to success in Vancouver. One treatment will occur this summer on City-owned parks, medians, boulevards and some landscape beds within the treatment area using the larvicide Acelepryn.

To complement these efforts, we are asking private landowners with properties located in the 2023 Port Coquitlam Treatment Area to give permission for treatment on their property, at no cost, by certified applicators during the summer of 2023.

The chosen larvicide, Acelepryn, is registered for this use by Health Canada's Pest Management Regulatory Agency and will be applied to your turf by licensed professionals. The larvicide targets root-eating grubs of *P. japonica*, and will not harm people, pets, mammals, birds, bees, butterflies or other animals. One application of Acelepryn per year between April 1 and July 15 (before turf dries out, and before the majority of *P. japonica* eggs hatch) is all that is required. Costs of this treatment will be covered by the B.C. government and project partners.

If you have received this letter and your property is located within the 2023 Port Coquitlam Treatment Area (See next page), please contact one of the following applicators, who are familiar with the *P. japonica* program, to arrange for a no-cost treatment of your property. These companies may also reach out directly to residents in the treatment area to seek permission to conduct treatment

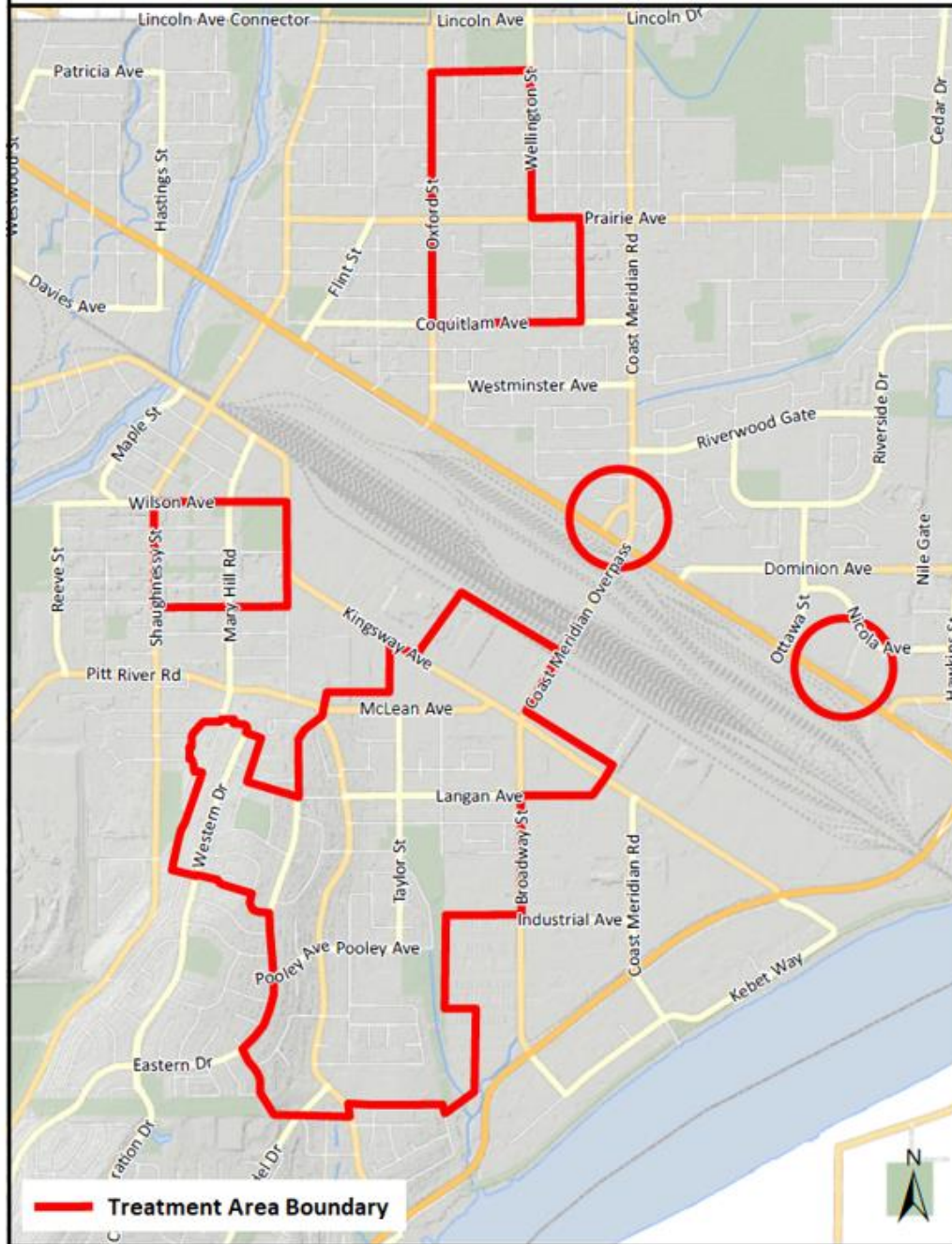
## Letter to Landowners:

- One for each city,
- Gives a quick summary of the JB program,
- Request landowner's permission to treat for JB
- Tool to help with seeking permission to treat and inform the owner / manager / resident.

## Made available in several ways:

- Mailouts from city
- Mailout or door drops by landscape applicators assigned to each area.
- Available from BCLNA
- On BC Agri website

## 2023 Port Coquitlam *Popillia Japonica* (JB) Treatment Area Map



### Letter to Landowners:

- Page 2 --
- includes treatment area map,



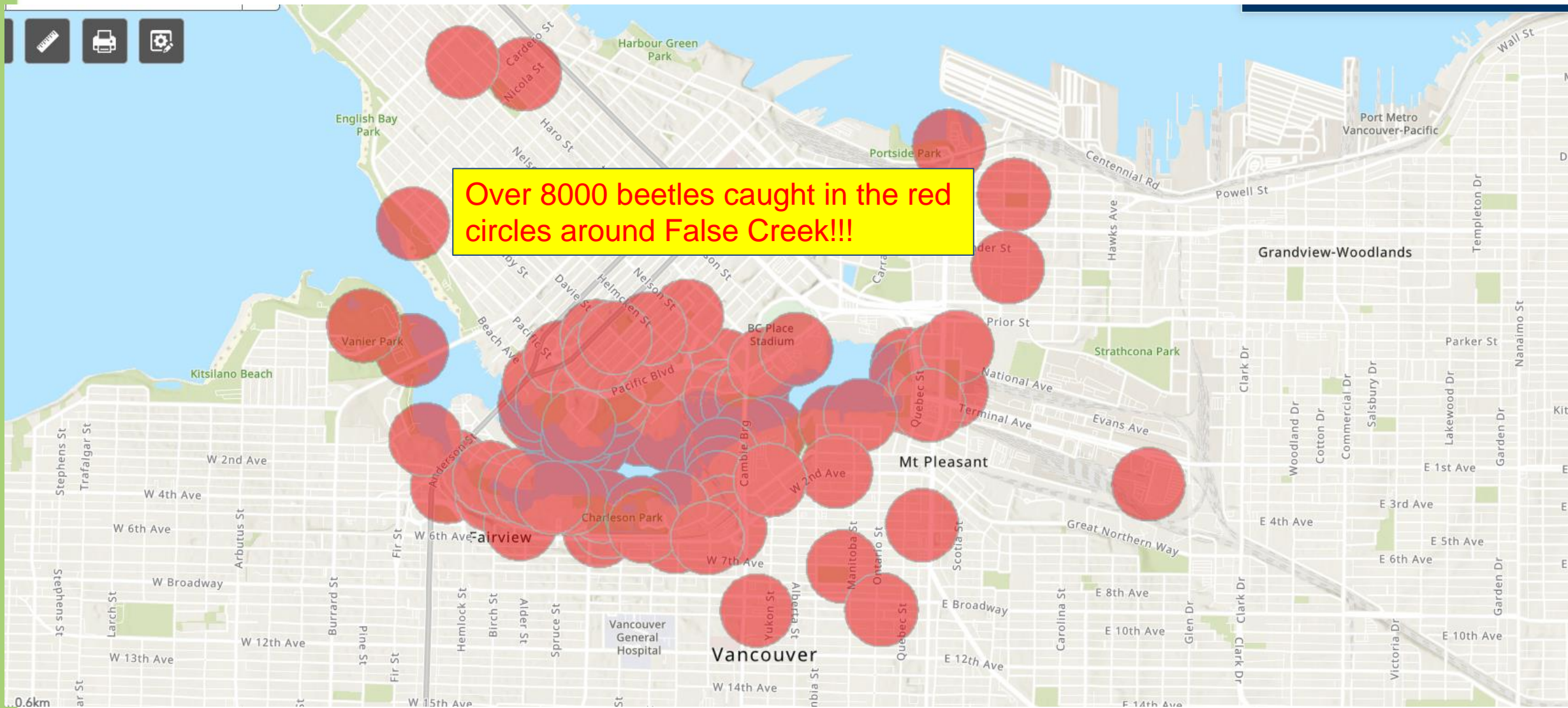
# Treatment Area

- The Treatment Area has changed each year, depending on where the beetles were caught in the previous year.
- An area will be treated at least 2 years (once per year).
- If no beetles are caught in an area for 2 years, it is considered free from JB and dropped from the Treatment Area.

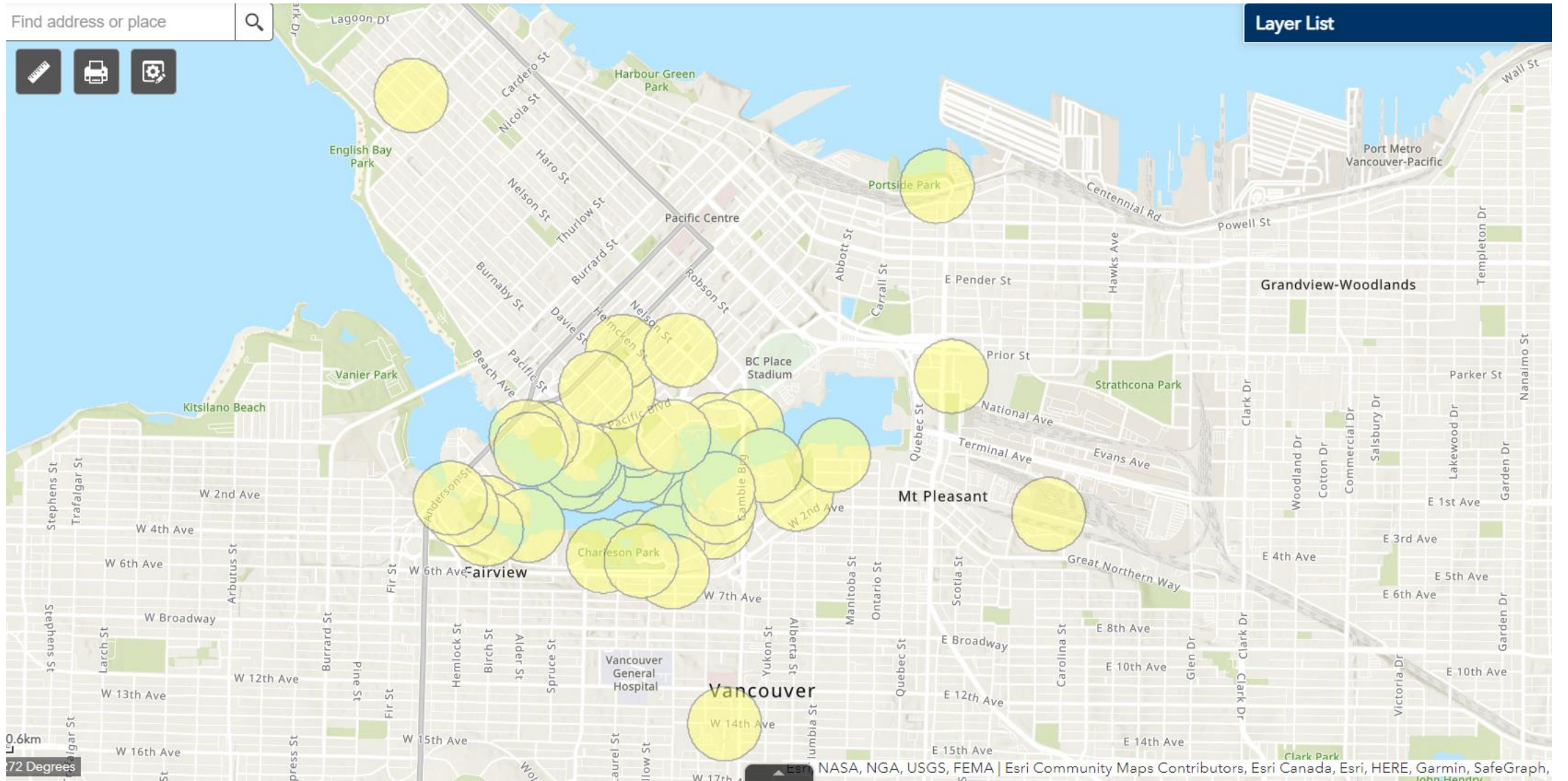


# Progression of Treatment Area in False Creek

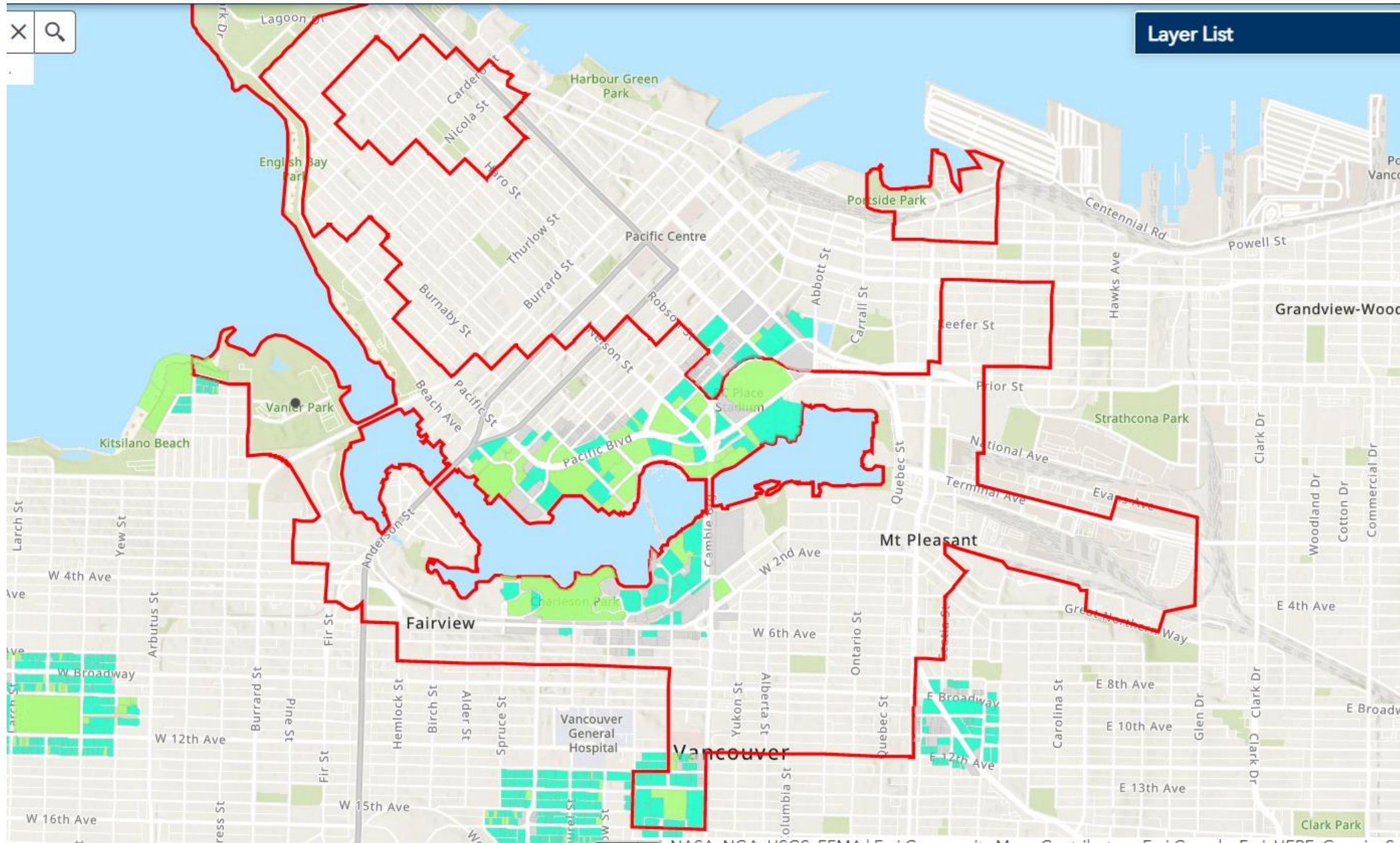
# 2018 trap catches and 200 m buffers (red circles)



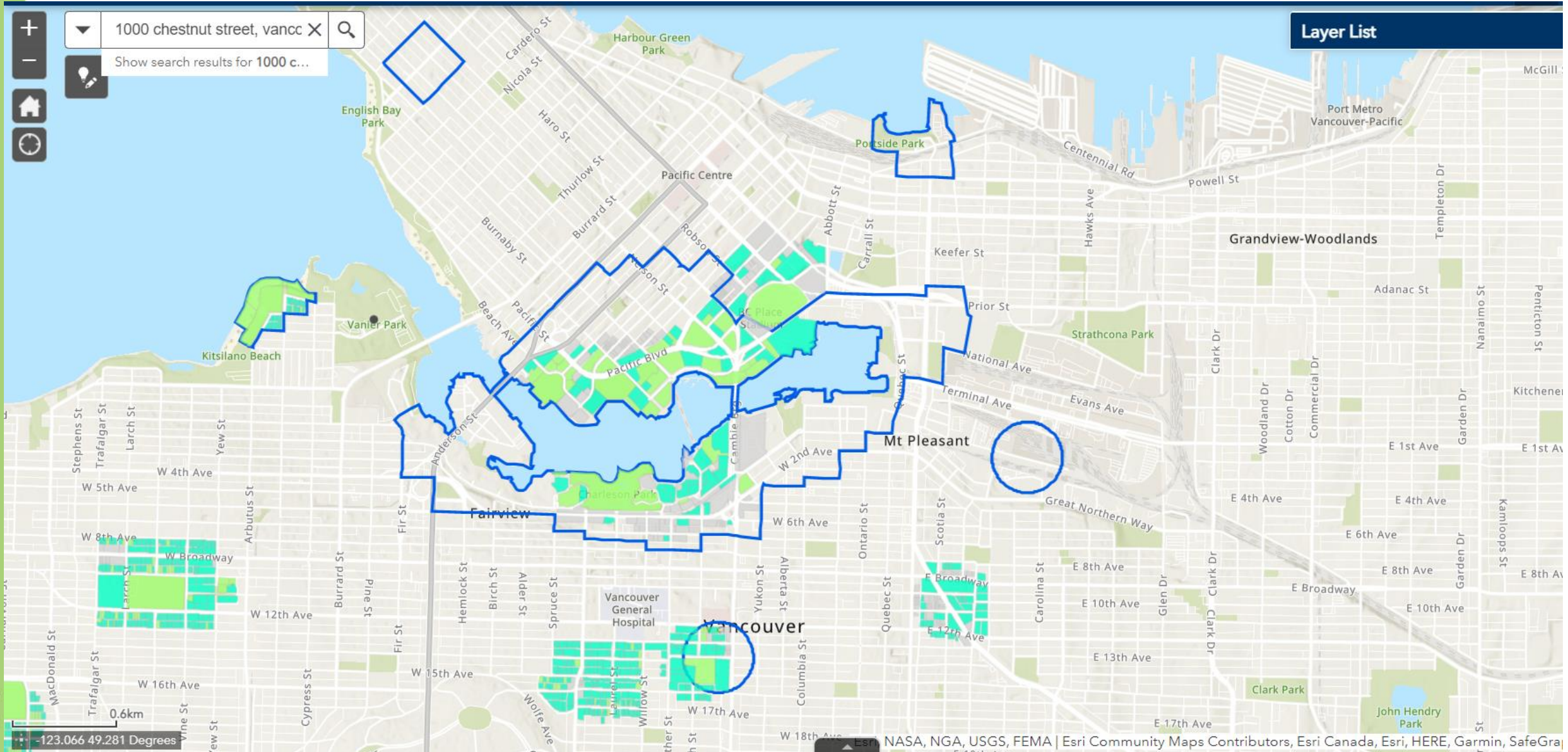
# 2019 trap catch and 200 m buffer (pale yellow circles)



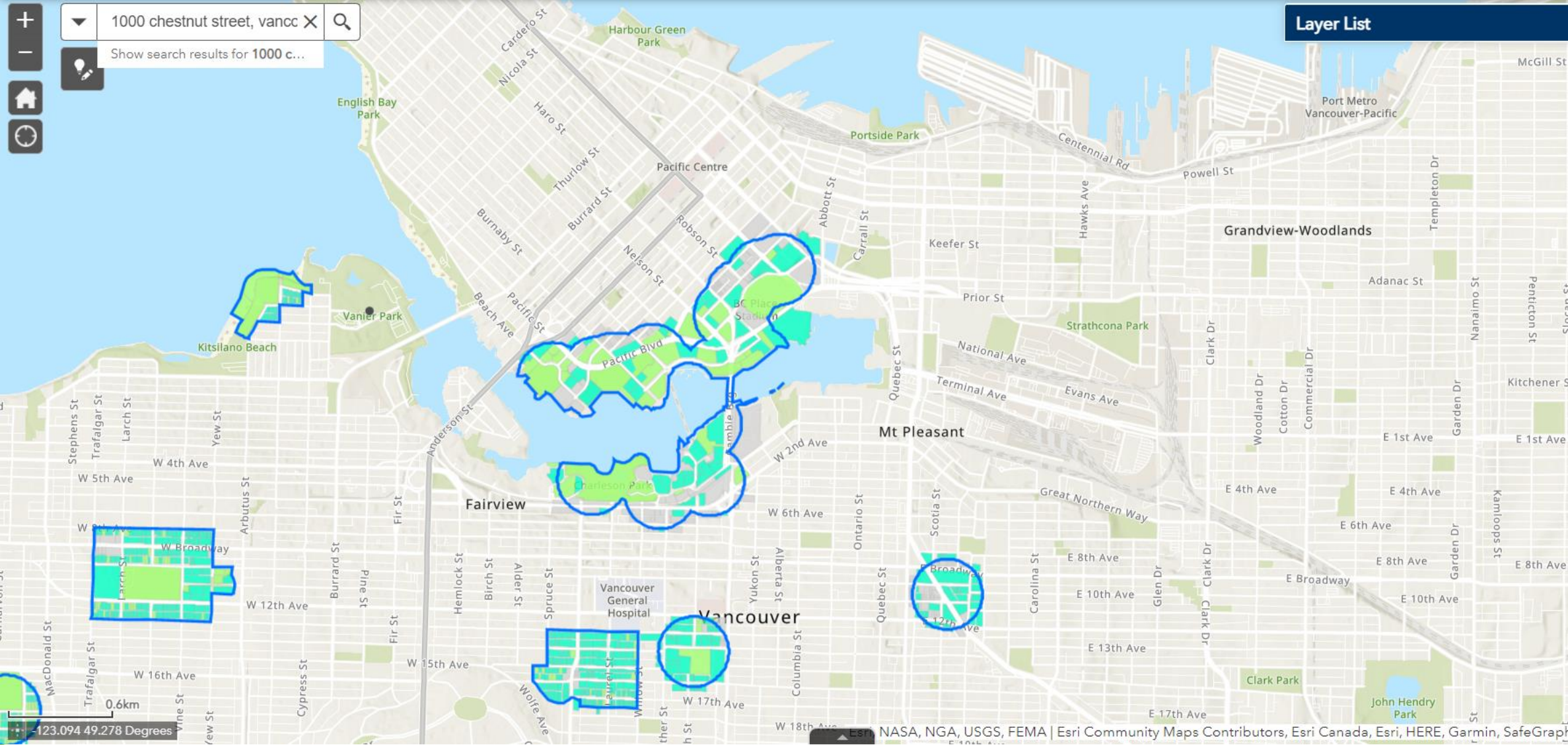
# 2020: Treatment Area outlined in red



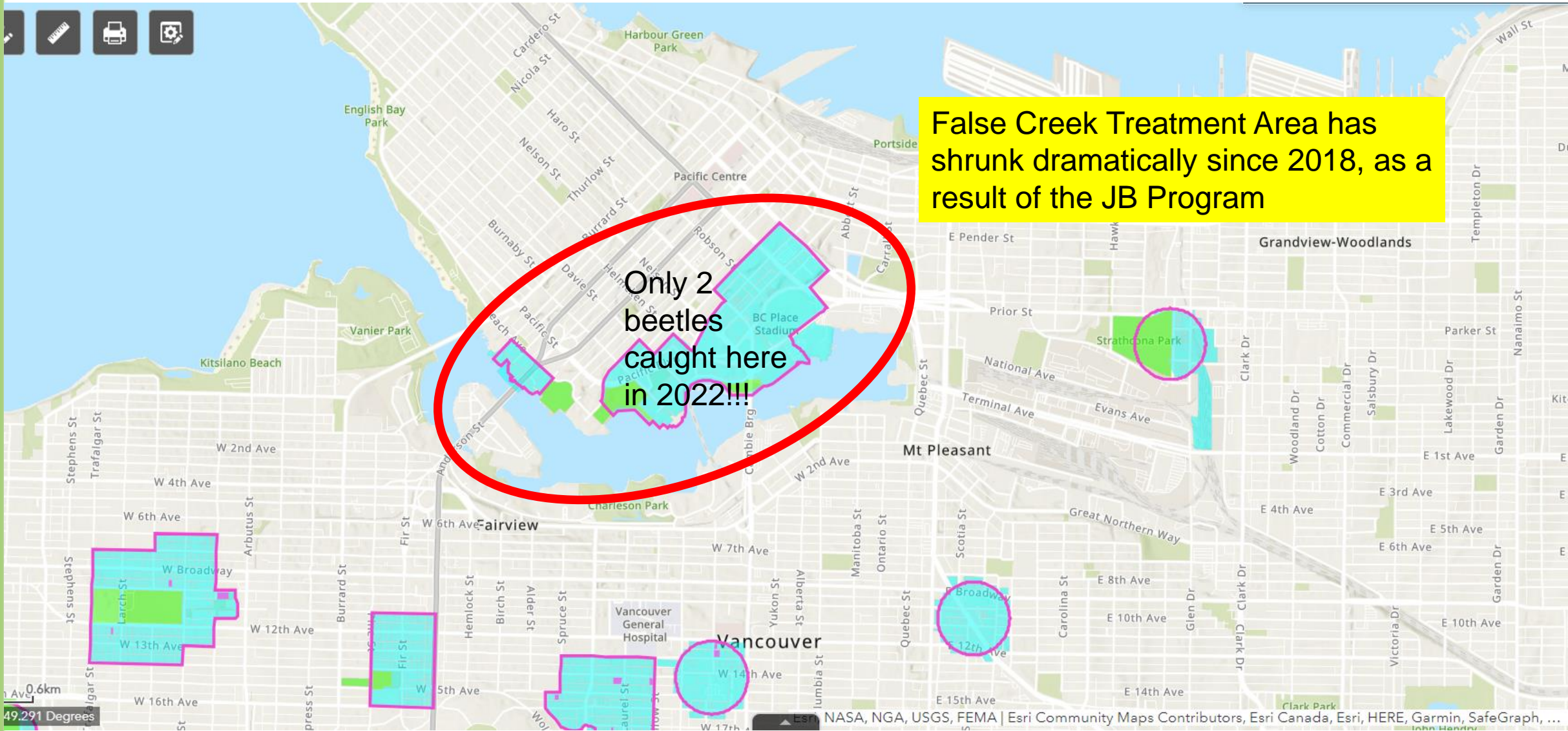
# 2021: Treatment Area outlined in blue



# 2022: Treatment Area outlined in blue



# 2023: Treatment Areas outlined in pink

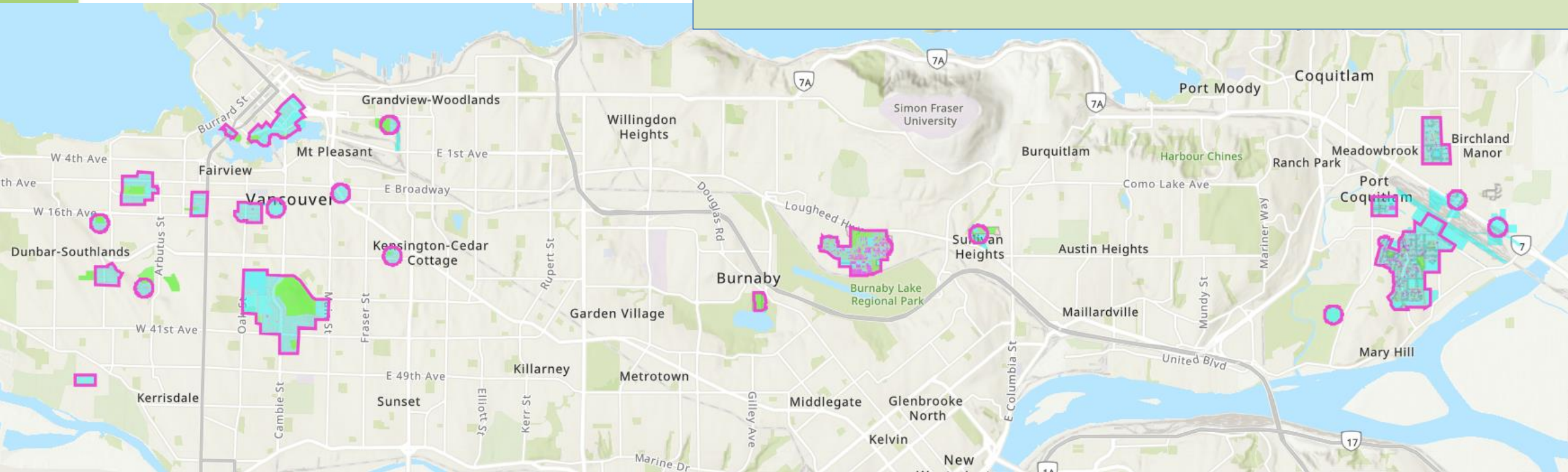




# 2023 Treatment Area

- **Pink outlined** areas are Treatment Areas.
- Vancouver, Burnaby, Port Coquitlam

**Goal is to treat all turf within 200 m from 2021-2022 beetle catch locations**



# 2022 JB Treatment Areas

Vancouver, Burnaby, Port Coquitlam

Goal is to treat all turf within 200 m from 2020-2021 beetle catch locations

Compare to last year, 2022: we did catch more beetles in Port Coquitlam, and as a result the 2023 Treatment Area expanded there.



# 2023 Vancouver JB Treatment Areas

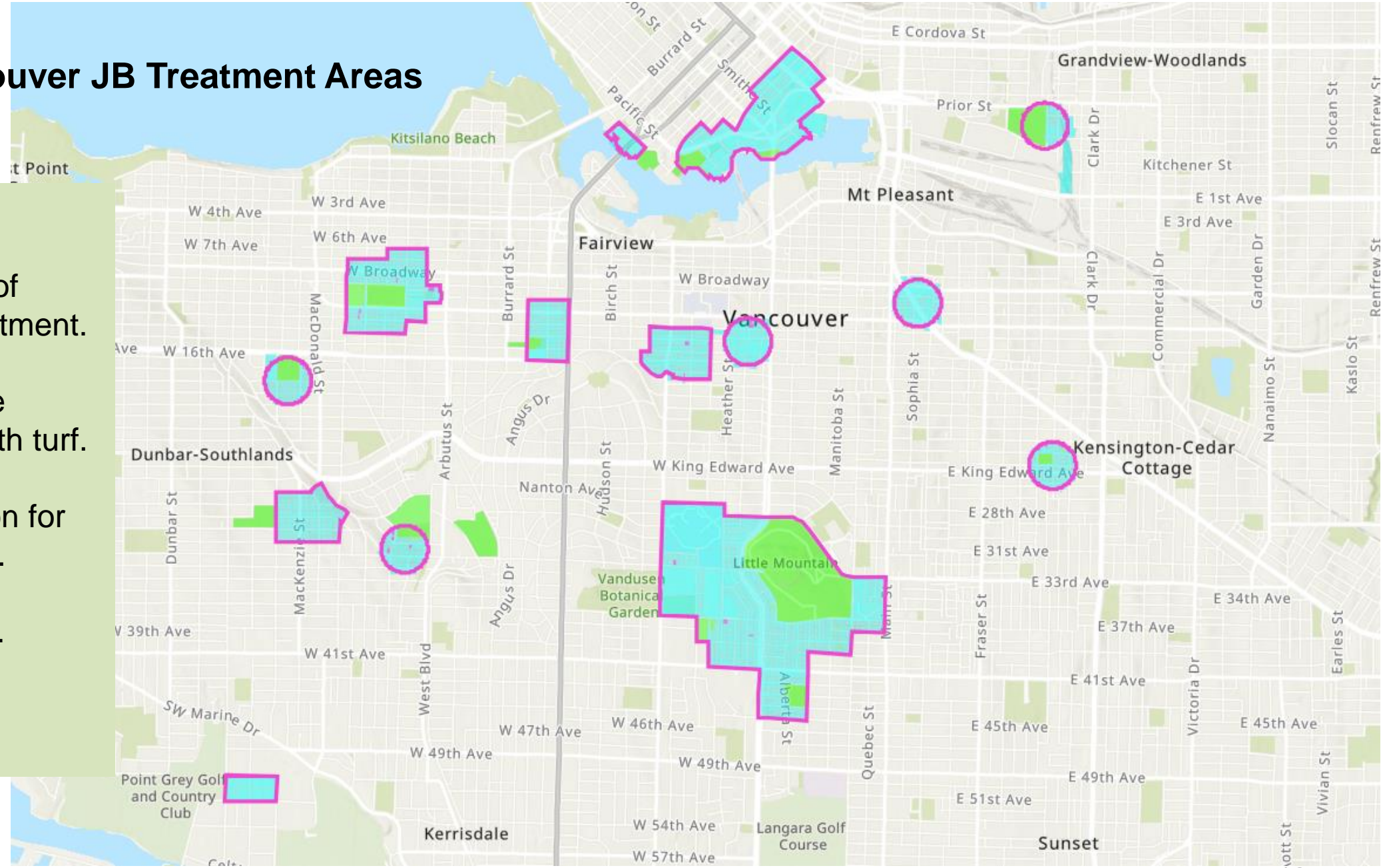
Colours within Treatment Areas: represent stages of completion of treatment.

Teal= parcel in the treatment zone with turf.

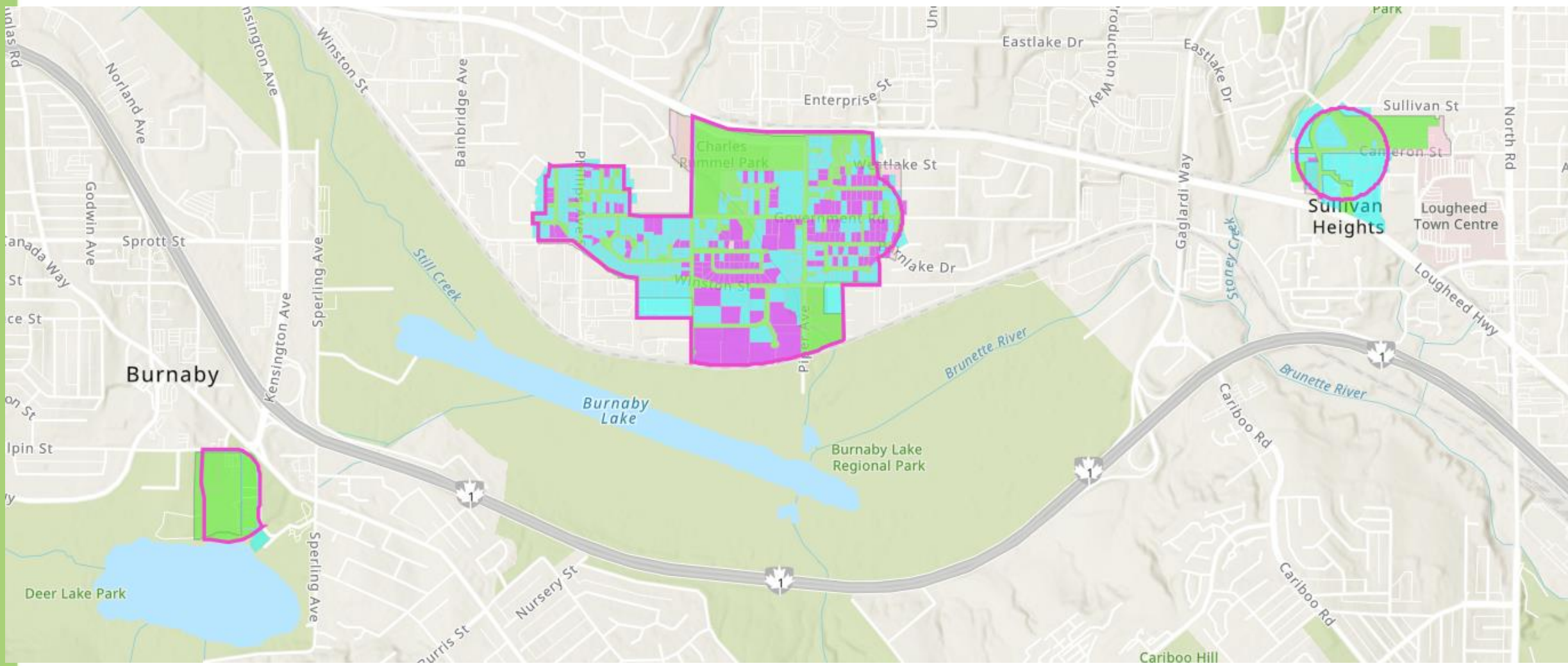
Purple= permission for treatment granted.

Green= treatment completed.

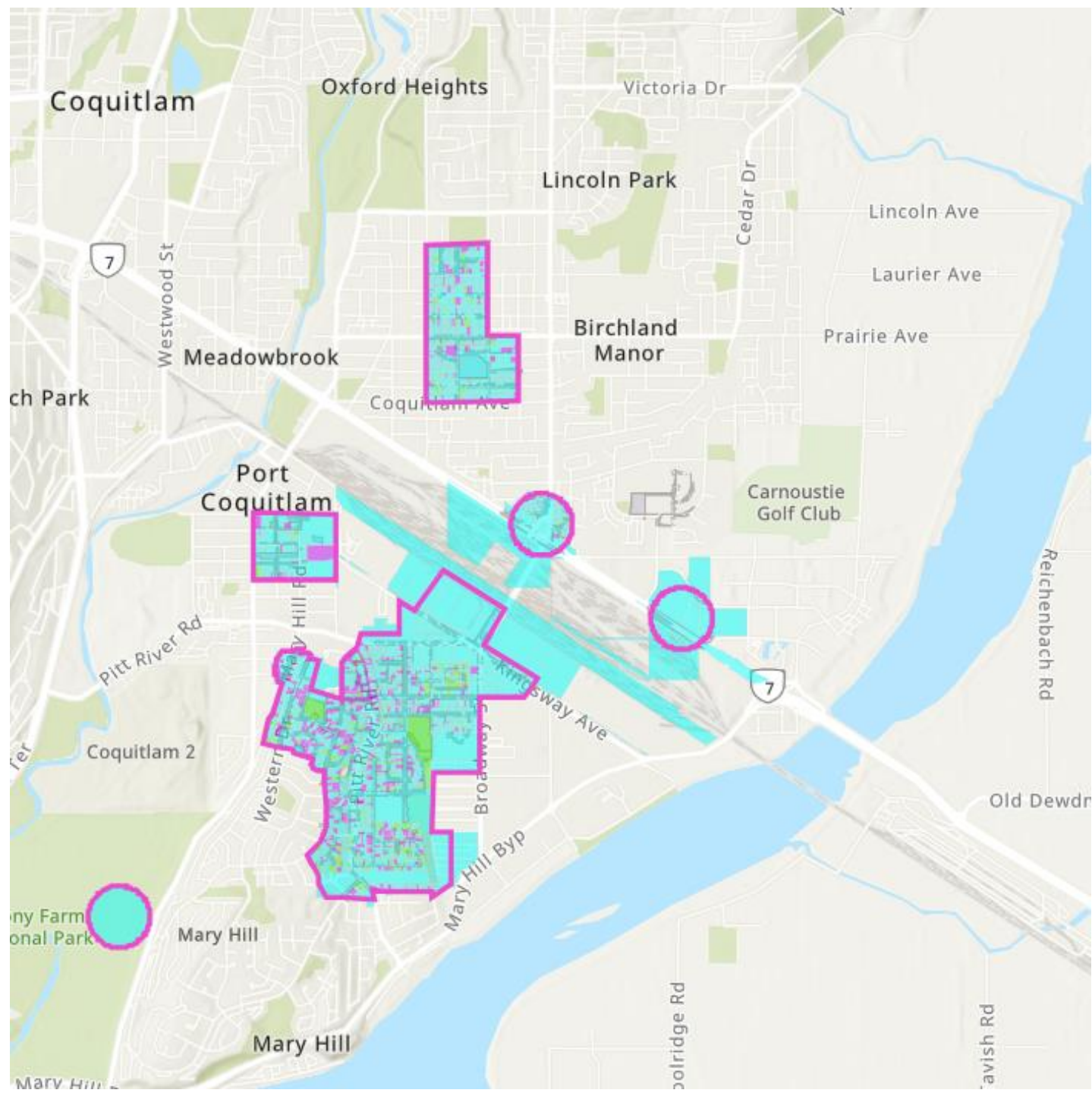
Grey= no turf



# 2023 Burnaby JB Treatment Area



# 2023 Port Coquitlam JB Treatment Area

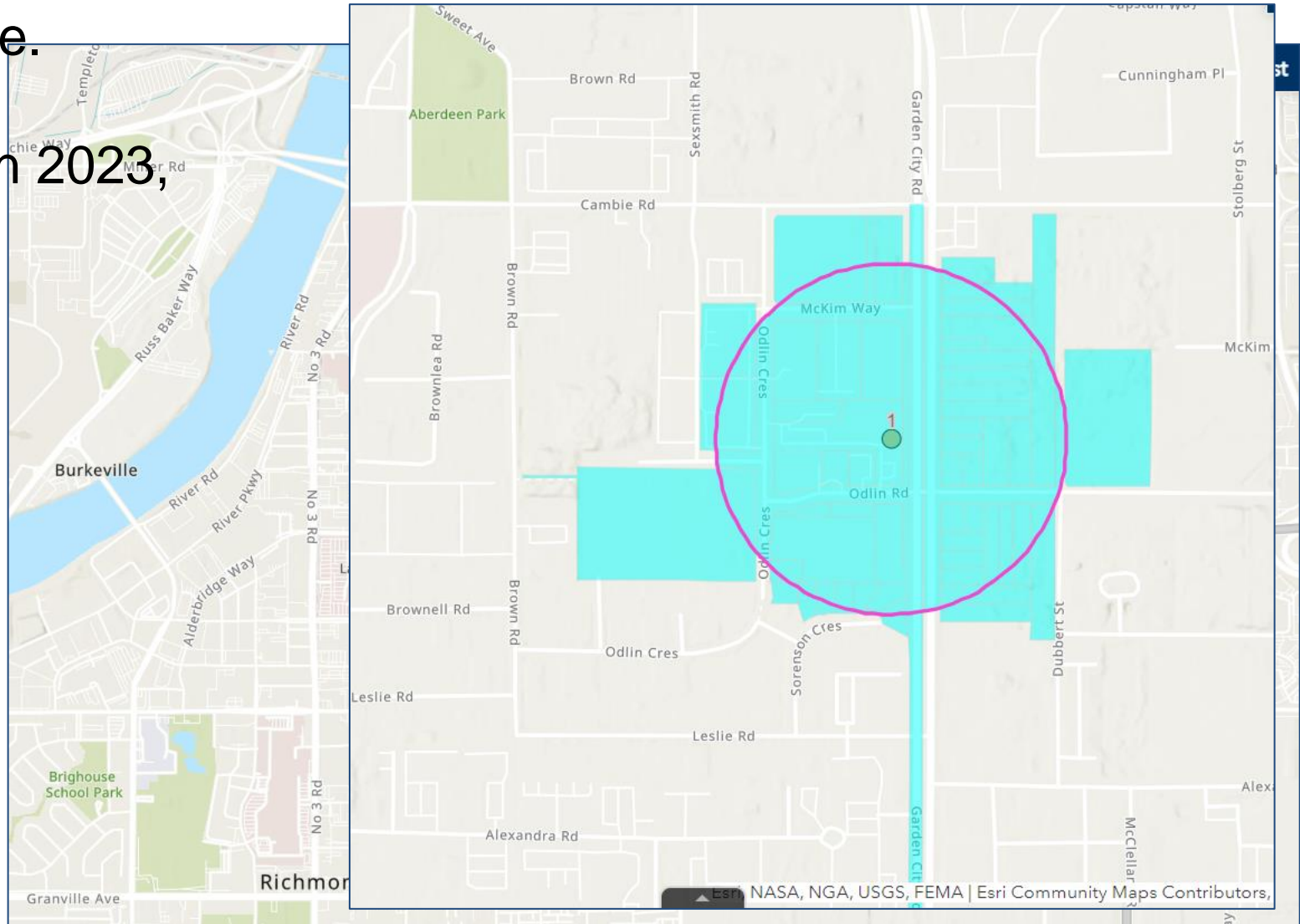


# 2023 Richmond JB Treatment Area:

Only one beetle caught here.

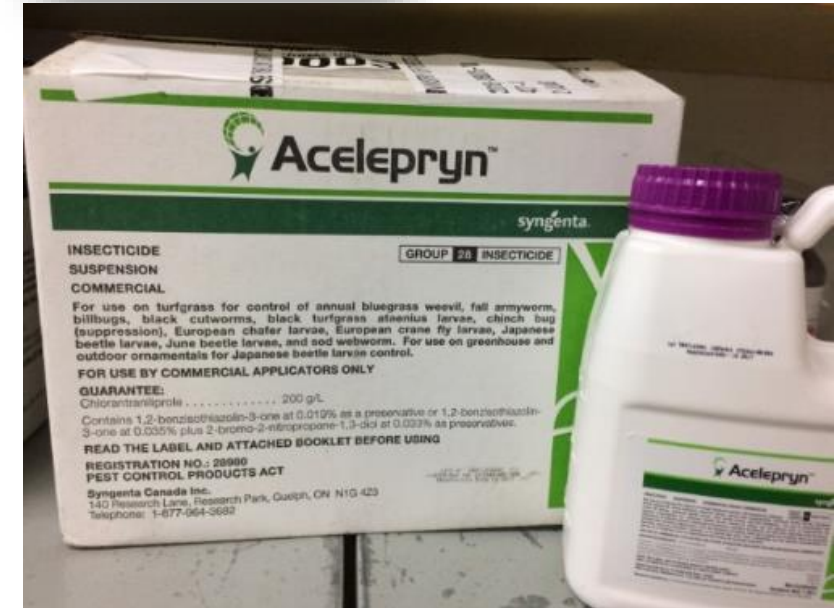
City treated the roadsides in 2023,

No private lands treated



# Treatment for larvae

- 1 application Acelepryn, (pcp#28980),
- Soil drench on turf in treatment zone
- 880 ml / ha
- 1000 – 1600 L water / ha
- Between April 1 and July 15
  - Label allows for treatment from April to September



- Target is the newly hatched larvae in mid summer (July)
- It takes some time for the Acelepryn to reach the root zone where the larvae are, and soil conditions are ideal (moist) in spring and early summer.



# Treatment for larvae:

- Acelepryn G (pcp# 33498)
- granular formulation, broadcast application
- Works fine on lawns.
- Ideal for small or challenging locations, landscape beds, or upper level turf.





# Acelepryn<sup>®</sup> Chloranthraniliprole



- Novel mode of action, Group 28.
- Registered in Canada (2009/10)
- Turf pests on label:
  - Japanese beetle, European Chafer, cutworm, etc.
  - High level of efficacy on beetle larvae in soil
- Reduced risk: US EPA and PMRA
- Low toxicity, safe on non-target organisms
  - birds, honey bees, mammals, fish

Product	Active ingredient (ai)	Grams ai / 100 m <sup>2</sup>	LD 50 dermal, mg/kg	LD 50 oral, mg/kg
Acelepryn	Chloranthraniliprole	1.12-1.76	>5000	>5000

# Sites to be treated with Acelepryn

- In general:

Solid turf with no gaps: = **TREAT**





- Boulevards and edges of roads
- **TREAT**



- Parks
- **TREAT**

2023-06-19



- **Planter boxes with grass**



- **Grass fence lines: TREAT**

grassed area around trees



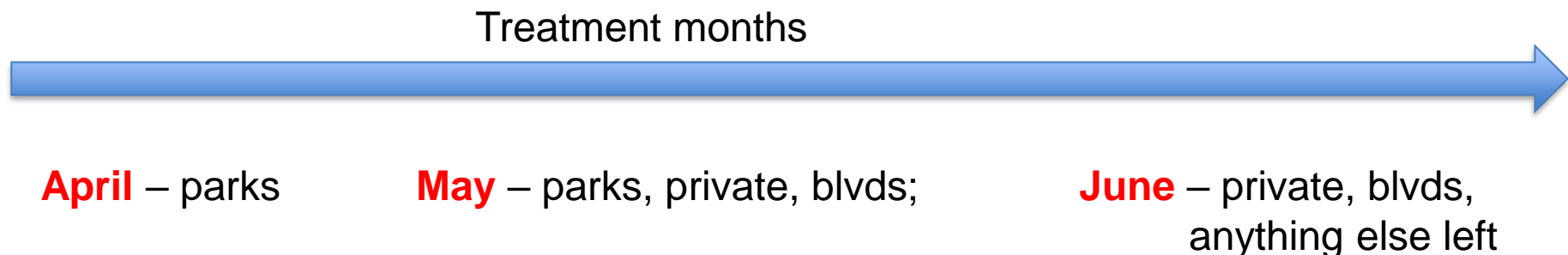


- The substrate is all **crushed gravel** which is a poor JB egg laying site. **No need to treat this.**



# Treatment Schedule: **April 1**, 2023 onwards

- Treatments have gone as planned in 2023.
- Parks are done, most boulevards and other public lands are done.
- Private property treatments are nearly completed.
- As soil dries out, conditions for treatment deteriorate.
- Planning for an end date for treatments: **June 30 this year.**



# Treatment Schedule:

City websites for more info on treatment plans on public land:

- Vancouver:
  - <https://vancouver.ca/home-property-development/treating-city-property.aspx>
- Burnaby:
  - <https://www.burnaby.ca/our-city/programs-and-policies/environment/japanese-beetles>
- Port Coquitlam:
  - <https://www.portcoquitlam.ca/city-services/pets-wildlife/japanese-beetle-treatment/#:~:text=How%20many%20Japanese%20Beetles%20were,is%20moved%20throu,ghout%20our%20region.>



# PUBLIC LANDS SIGNS AND TAPE

- Parks were not closed during treatment
  - Staff keep folks off the turf and inform park users of the treatment



# City of Vancouver - PUBLIC LANDS SIGNS

- Public lands included Parks, Engineering (boulevards & medians) and Real Estate & Facilities lands



# Notification, Signs: Private



Protecting Parks  
and Green Spaces

## Japanese Beetle Response

[www.gov.bc.ca/japanesebeetle](http://www.gov.bc.ca/japanesebeetle)

PLEASE STAY OFF THE GRASS  
TREATMENT UNDERWAY



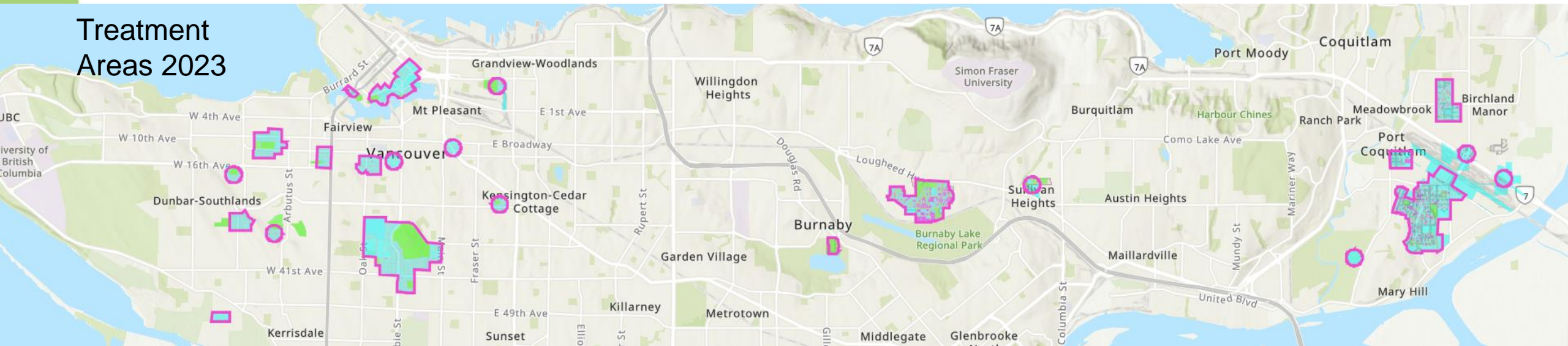
CANADIAN  
AGRICULTURAL  
PARTNERSHIP

BRITISH  
COLUMBIA

Canada

# Costs for Treatment:

- **Public:** The cities cover the cost of applications on public land, parks, roadsides, boulevards, etc.
- **Private:** For treatment of turf on private land within the Treatment Area costs will be covered by the Province (Ministry of Agriculture and Food)



# Companies doing treatments in 2023

- Para Space Landscaping
  - Bartlett Tree Experts
- 
- Vancouver,  
Burnaby,  
Port Coquitlam
- Cutting Edge Vancouver
  - Neighbourhood Lawncare
  - Liu's Garden Services
- 
- Vancouver only

# Process for Treatment of Turf on Private land:

By licenced applicators:

After a conversation with Tracy H to indicate interest:

1. Landscaper/applicator seeks permission to treat from owner/manager
2. Quotes the Ministry for the work; I'll approve it if in Treatment Area.
3. Once work is done, Pesticide records are required (as for Min of Env)
4. Invoice Ministry of Ag for the work





**Pesticide Use Record**  
FORM REFERENCE CODE: EPD-IPM-08.2

This pesticide use record must be completed for every non-excluded pesticide that is used for each treatment location and day of use. It does not have to be submitted to the ministry unless requested.

Pesticide use records must be kept for a period of three (3) years following the pesticide use and must be made available to the ministry upon request. Please note that while a record of each pesticide use is required, the use of this specific form is voluntary and many applicators elect to use their own systems to record the required information. This information is used to generate an annual use summary.

Abbreviations or codes may be used to complete this record if a key to the abbreviations and codes is attached to this form.

<b>Authorization Number<sup>1</sup></b>			
<b>Authorization Holder Name<sup>2</sup></b>			
<b>Client Name<sup>3</sup></b> (if client holds an authorization)			
<b>Client Authorization Number<sup>3</sup></b> (if applicable)			
<b>Applicator Name</b>			
<b>Applicator Certificate Number</b>			
<b>Pesticide Use Details</b>			
<b>Date (YYYY/MM/DD)</b>		<b>Start time</b>	
<b>Name<sup>4</sup></b>			
<b>Address<sup>4</sup></b>			
<b>Treatment location<sup>5</sup></b> (address and/or description)			
<b>Target Pest or Purpose of Treatment</b>			
<b>Pesticide Trade Name</b>			
<b>PCP Number</b>			
<b>Application Rate</b>		<b>Quantity Used</b>	
<b>Application Method</b>			
<b>Precautionary Advice Given<sup>6</sup></b>			
<b>Monitoring Method</b>			
<b>Injury Threshold</b>			
<b>Precipitation</b>		<b>Wind Speed<sup>7</sup></b>	
<b>Temperature</b>		<b>Wind Direction<sup>7</sup></b>	
<small><sup>1</sup> Licence, Permit or PUN Confirmation number  <sup>2</sup> Name of Licence, Permit or PUN Confirmation holder  <sup>3</sup> Complete if pesticide application is performed for a Licence, Permit or PUN confirmation Holder. Use separate pages to record information for each different Licence, Permit or PUN Confirmation holder.  <sup>4</sup> Client name and address (if pest control is provided as a service, otherwise Property Manager name and address)</small>		<small><sup>5</sup> Include enough information to ensure that a person can determine exactly what was treated.  <sup>6</sup> Safe re-entry time, days to harvest and other advice given  <sup>7</sup> Record if pesticide application is outdoors.</small>	

# Daily Pesticide Use Record

On Ministry of Environment's website:

[https://www2.gov.bc.ca/assets/gov/environment/pesticides-and-pest-management/pesticide-use/forms/pesticide\\_use\\_record.pdf](https://www2.gov.bc.ca/assets/gov/environment/pesticides-and-pest-management/pesticide-use/forms/pesticide_use_record.pdf)

Submit copies to Tracy Hueppelsheuser at [Tracy.Hueppelsheuser@gov.bc.ca](mailto:Tracy.Hueppelsheuser@gov.bc.ca)

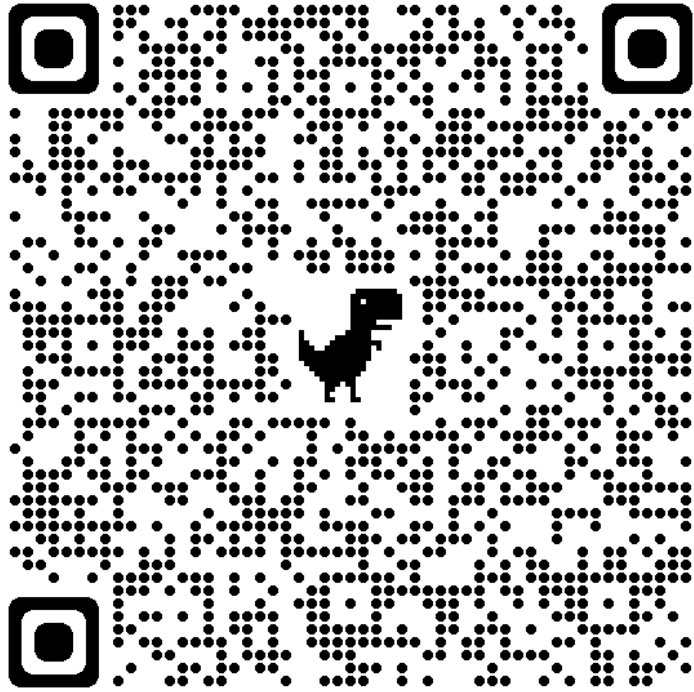
Do one for each property/parcel, or a set of parcels.

# Plan for upcoming years?

- Trapping results in 2023 will determine the size and location of the treatment areas in 2024
- Treatment area will shrink as beetle numbers drop
- 2 years of no beetles = Eradicated
- CFIA annual surveys will continue as long as JB is regulated
  - Will continue to keep watch for JB even after the eradication is complete.

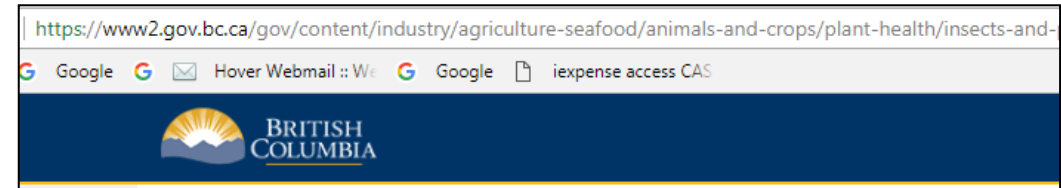


## QR Code for Ministry JB website



### Includes:

- Overview of the Response Program
- Treatment Areas and Communication
  - (letter to landowners for each city)
- Identification, life cycle,
- How to report if you see beetles
- Where to get more info



Japanese Beetle Pest Alert on BC Ministry of Agriculture website:

[gov.bc.ca/japanesebeetle](https://www2.gov.bc.ca/gov/content/industry/agriculture-seafood/animals-and-crops/plant-health/insects-and-pests/japanese-beetle-pest-alert)

### Additional websites and links:

- Canadian Food Inspection Agency
- Cities of Vancouver, Burnaby, Port Coquitlam
- Invasive Species Council of BC
- BC Landscape and Nursery Association

## Questions?

[Tracy.Hueppelsheuser@gov.bc.ca](mailto:Tracy.Hueppelsheuser@gov.bc.ca)

phone 778-666-0519