



# 2022 Termite Status Report

City of Guelph

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April 2023

Building Services

## **2022 Executive Summary**

### **Guelph's Termite Control Program**

The City of Guelph has an introduced infestation of the eastern subterranean termite, *Reticulitermes flavipes*, which the City has been tracking and combating since the 1970s. This insect pest can be difficult and expensive to control and can cause serious structural damage to wood frame structures and housing. In order to protect the housing stock of the City, and to prevent the continuous spread of this invasive species, the City has implemented a comprehensive termite control program. Traditional termite control uses soil insecticides and wood preservatives to treat affected structures, but does not address the termite population, which continues to spread. The City's program integrates all traditional methods of pre-treatment and remedial treatment as well as preventative measures in new construction, termite habitat elimination, and termite population suppressive treatments.

### **Status of the Six Management Areas**

The City had six termite management areas as shown in (Figure 1). However, due to complete inactivity for five consecutive years, the Emma-Pine management area was removed from further active management in 2017 and the Windermere management area was removed from further active management in 2019. Of the four areas with ongoing monitoring, the John Galt Park area had no activity, and the King Street and Woolwich areas each had one active property with minor activity in 2022. Figures 2 and 3 show the the levels of activity in these areas from 2010 to 2022. Figure 4 shows the number of active properties and Figure 5 shows the number of termites trapped in these areas from 2010 to 2022 (Eastview area excluded). As expected, the highest level of activity was in the Eastview management area which was newly discovered in the fall of 2019 (see below).

### **Eastview Management Area**

Traps were inspected 16 times from May through October. A total of 58,114 termites were trapped from 11 active properties from 14 different active traps. This represented a 62.8% reduction compared to the previous year. Figures 6 and 7 show the number of active properties and number of termites trapped on each inspection in the Eastview area.

One Eastview property was treated with a soil termiticide and a borate spray for minor indoor activity. Yard wood management actions included removal of wood chip mulch, old fencing, edging boards, wood posts, and an old retaining wall. Assistance with yard wood clean up was conducted on eight properties. Another nine dead or dying trees were removed and 12 stumps were excavated. One hundred borate rods were installed in retaining walls and fence posts. Spring and autumn nematode treatments were applied on all active properties.

## **Chemical treatments and inspections in 2022**

Two remedial treatments were performed with borate sprays and one property was treated with soil termiticides. In addition, three inspections were performed for real estate transactions, six for building permits, and 30 disposal permits were issued.

## **Reclassified properties and shrinkage of the management areas**

The new boundaries of the red and blue zones of the termite management areas for 2023 are shown in Figure 8. A total of 93 properties changed status from red or blue, or blue to white, or blue to red. Properties that change status are listed in Table 1.

## **Ongoing monitoring and reductive trapping**

Ongoing termite monitoring and management will continue in the Woolwich, John Galt Park, King Street, and Eastview management areas in 2023. Monitoring traps will be inspected on approximately a two-week cycle. Active rolls will be replaced with fresh rolls on each inspection. Termites will be extracted and weighed to quantify the yield from active traps. Reductive trapping from monitoring traps continues to be an important component of the control program. Therefore, please do not disturb the traps and never apply any sort of chemical or other treatment to the traps, which would defeat their purpose. Please leave monitoring of the termite traps to the City's technicians and do not tamper with or disturb the traps.

## **2022 Report**

As with previous annual reports, the full 2022 report can be accessed on the City's website at [guelph.ca/termites](http://guelph.ca/termites).

## **Goals for the 2023 season**

The goals for the upcoming season will be similar to last year:

- This executive summary, all figures and Table 1, will be sent to affected residents as an annual progress report in mid-April.
- Maps of the new boundaries of the termite management areas will be posted on the city's website and reclassified properties will be flagged in building department records.
- Existing monitoring traps will be refurbished with new cardboard rolls and lids, and any missing traps will be replaced in May.
- Traps will be checked on a biweekly to monthly cycle through the end of October, depending on level of activity.
- Monitoring traps will be reduced or removed in re-classified areas in June.
- Insect-pathogenic nematodes will be applied in the spring and fall from in areas of detected activity, where residents have signed authorization forms.
- Chemical spot treatments will be applied in the vicinity of any ongoing structural activity with signed consent of owners.
- Yards will be monitored for any inappropriate wood such as wood chip mulch, firewood, scrap lumber, and stumps; disposal orders and permits will be issued as required.
- Traps will be removed in November with the anticipated conclusion of the project at the end of this season.

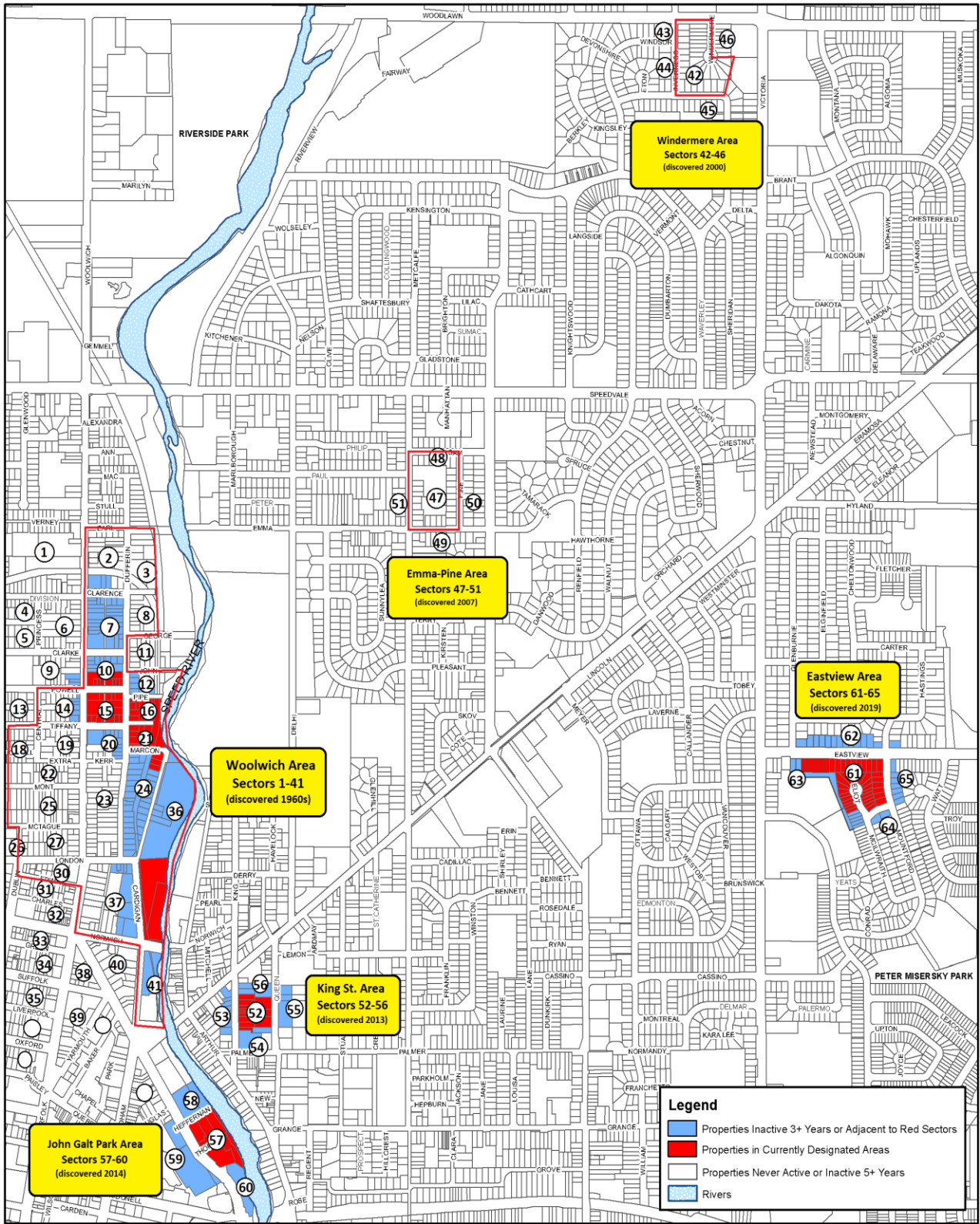


Figure 1. Guelph termite management areas, sectors numbers, and red and blue zones in 2022.

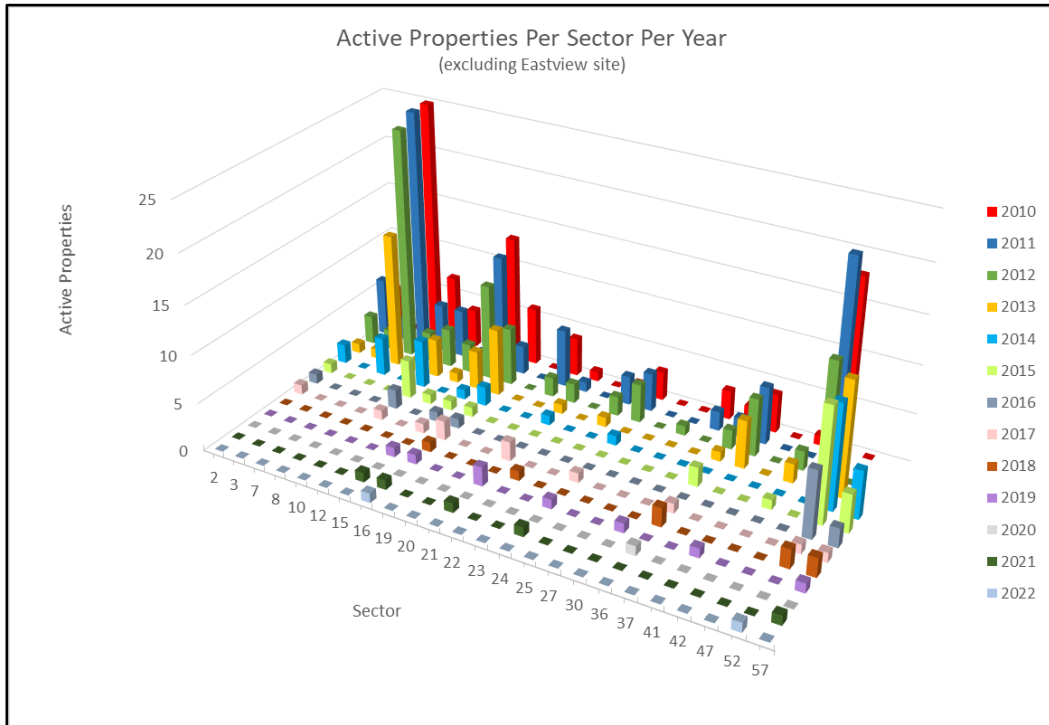


Figure 2. Active properties per sector per year 2010-2022.

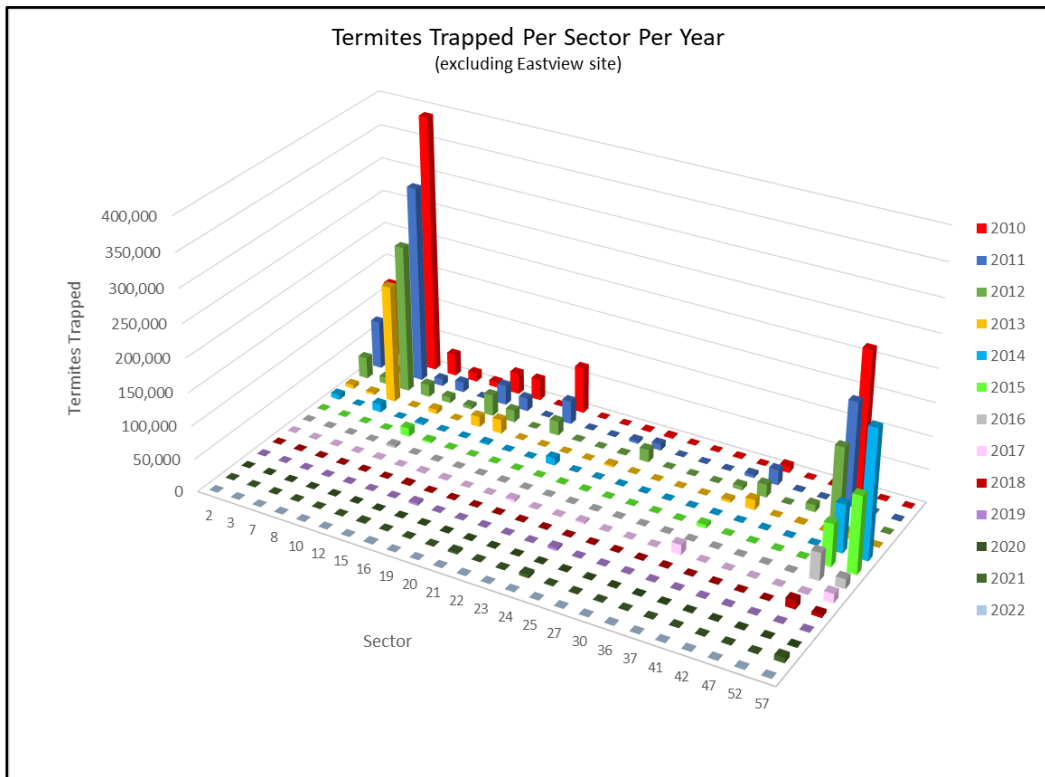


Figure 3. Total termites trapped per sector per year 2010-2022.

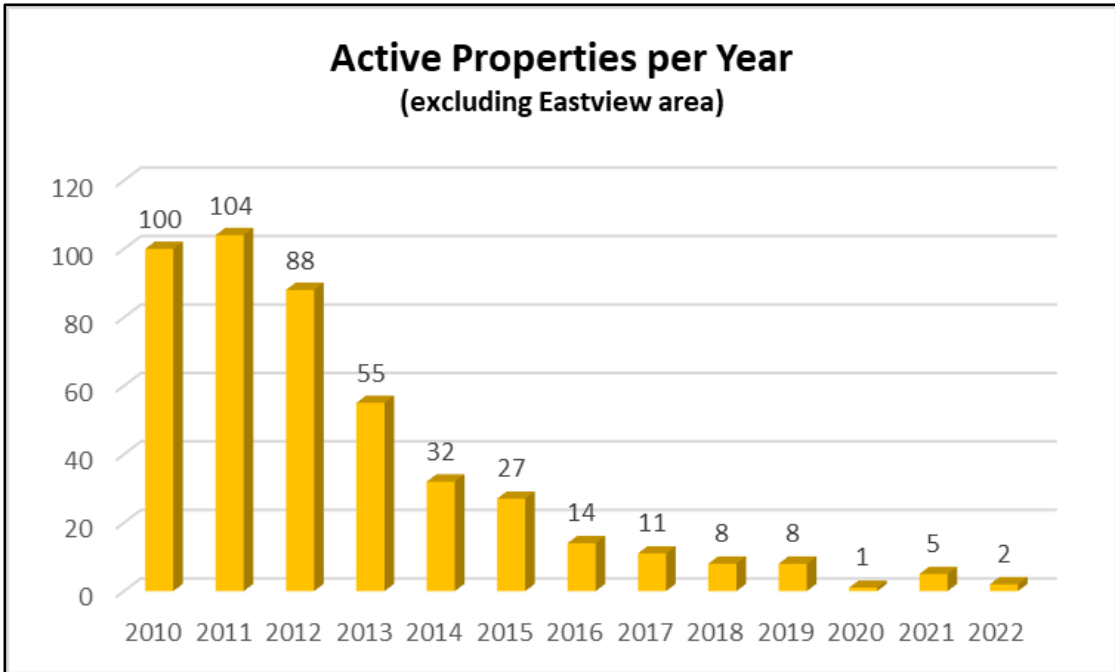


Figure 4. Total number of active properties per year 2010-2022.

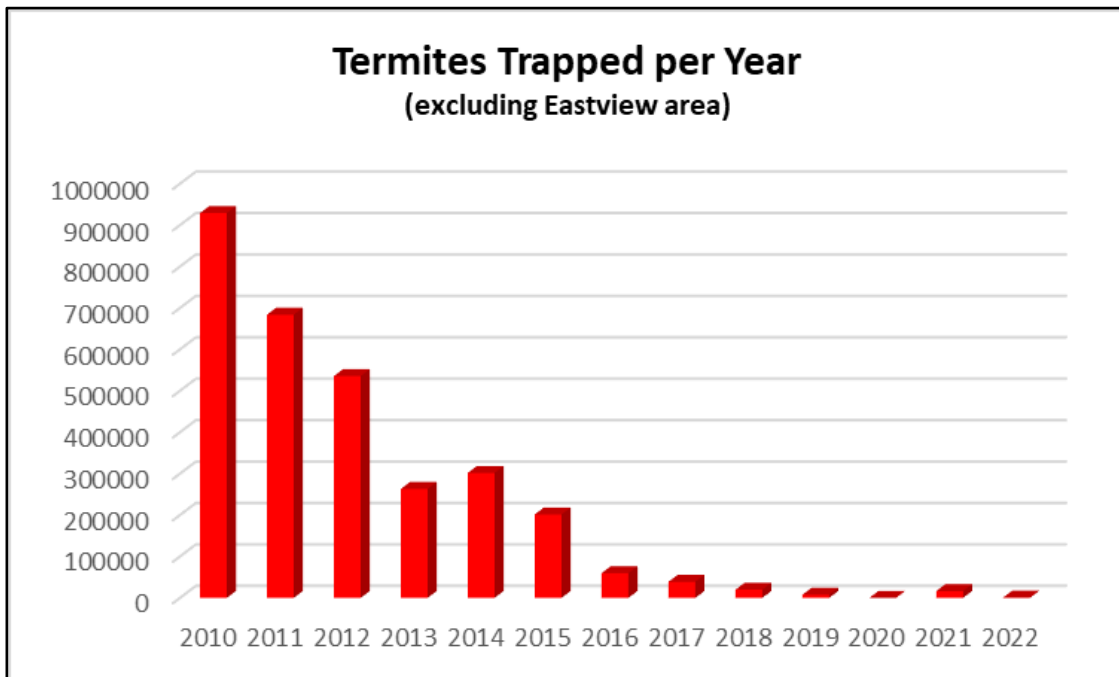


Figure 5. Total termites trapped per year 2010-2022.



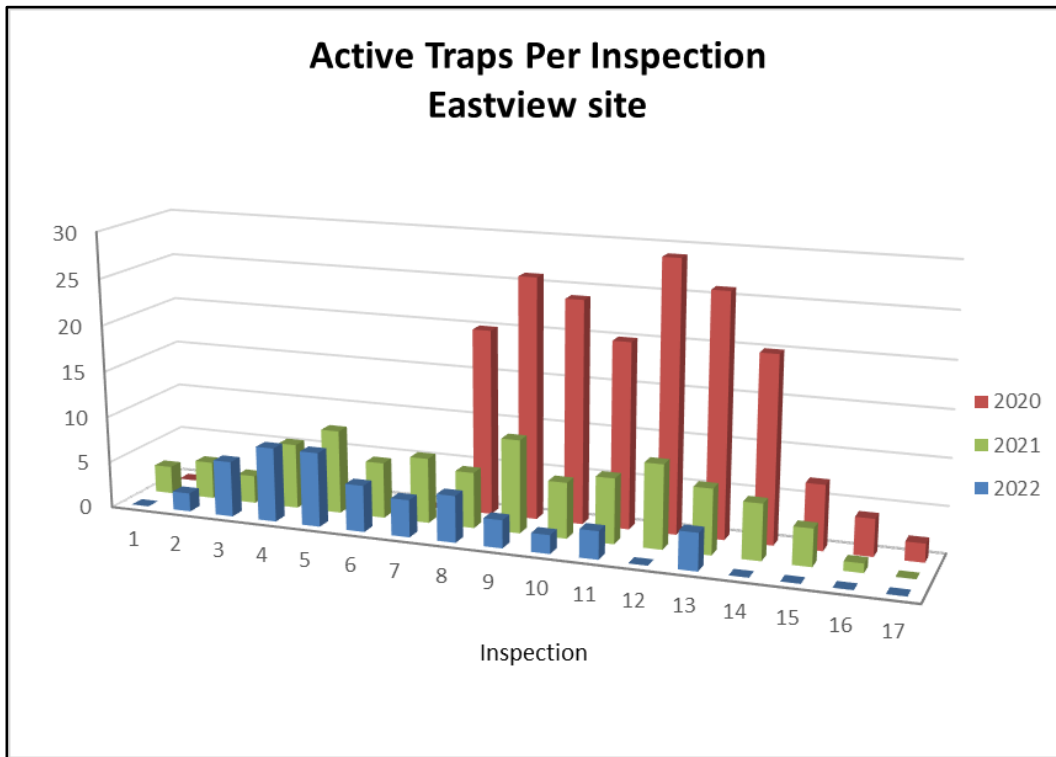


Figure 7. Active Traps per Inspection in the Eastview Area in 2020-2022.

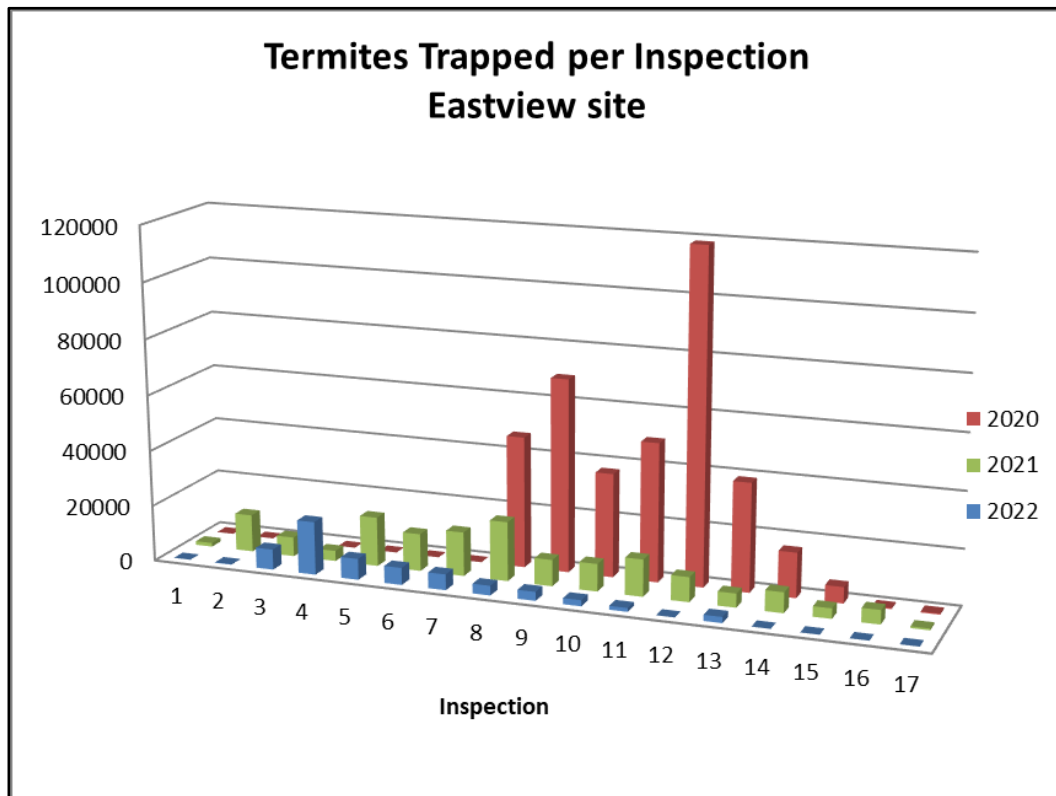


Figure 8. Termites Trapped per Inspection in the Eastview Area in 2020-2022.



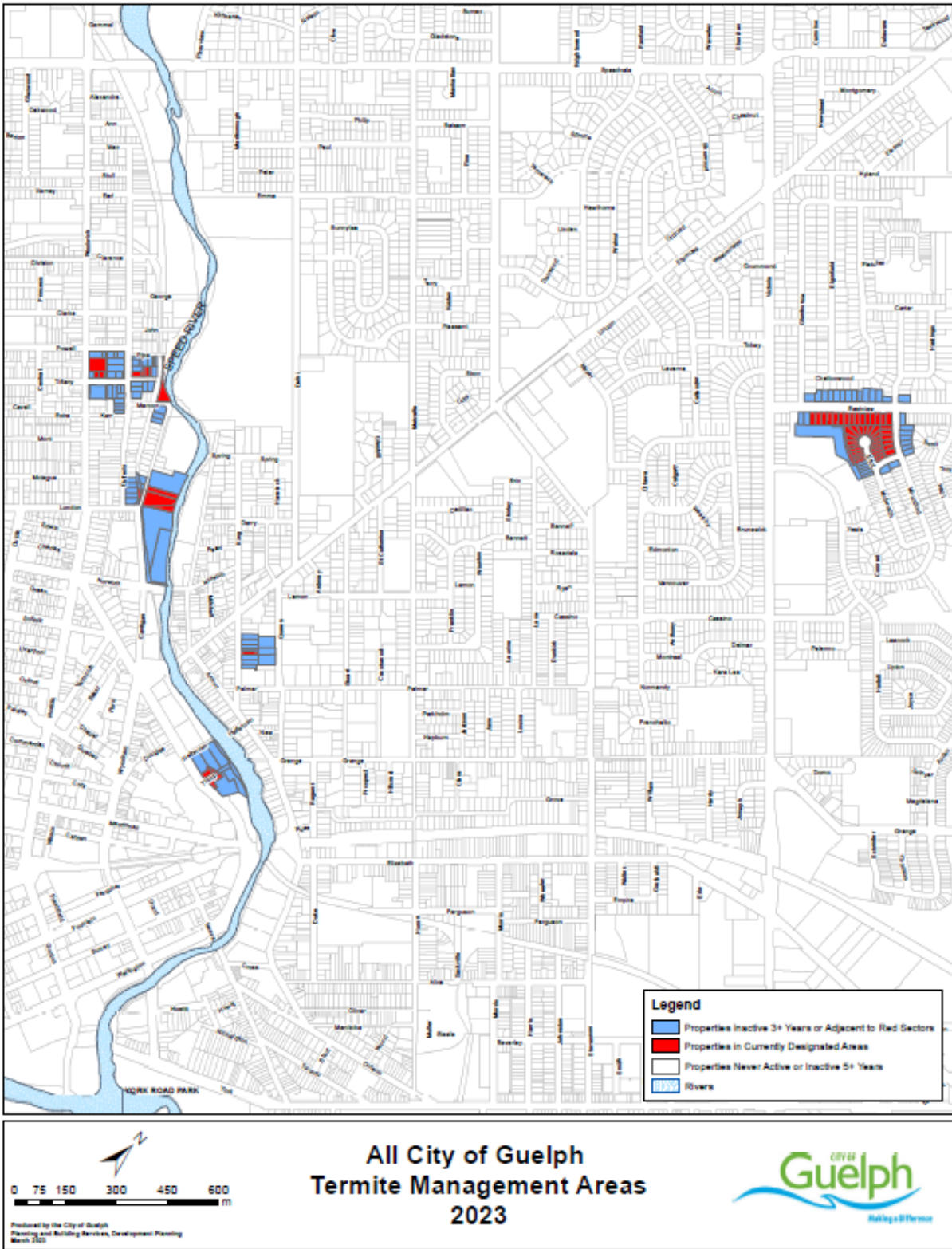


Figure 9. Revised boundaries of the red and blue zones for 2023.

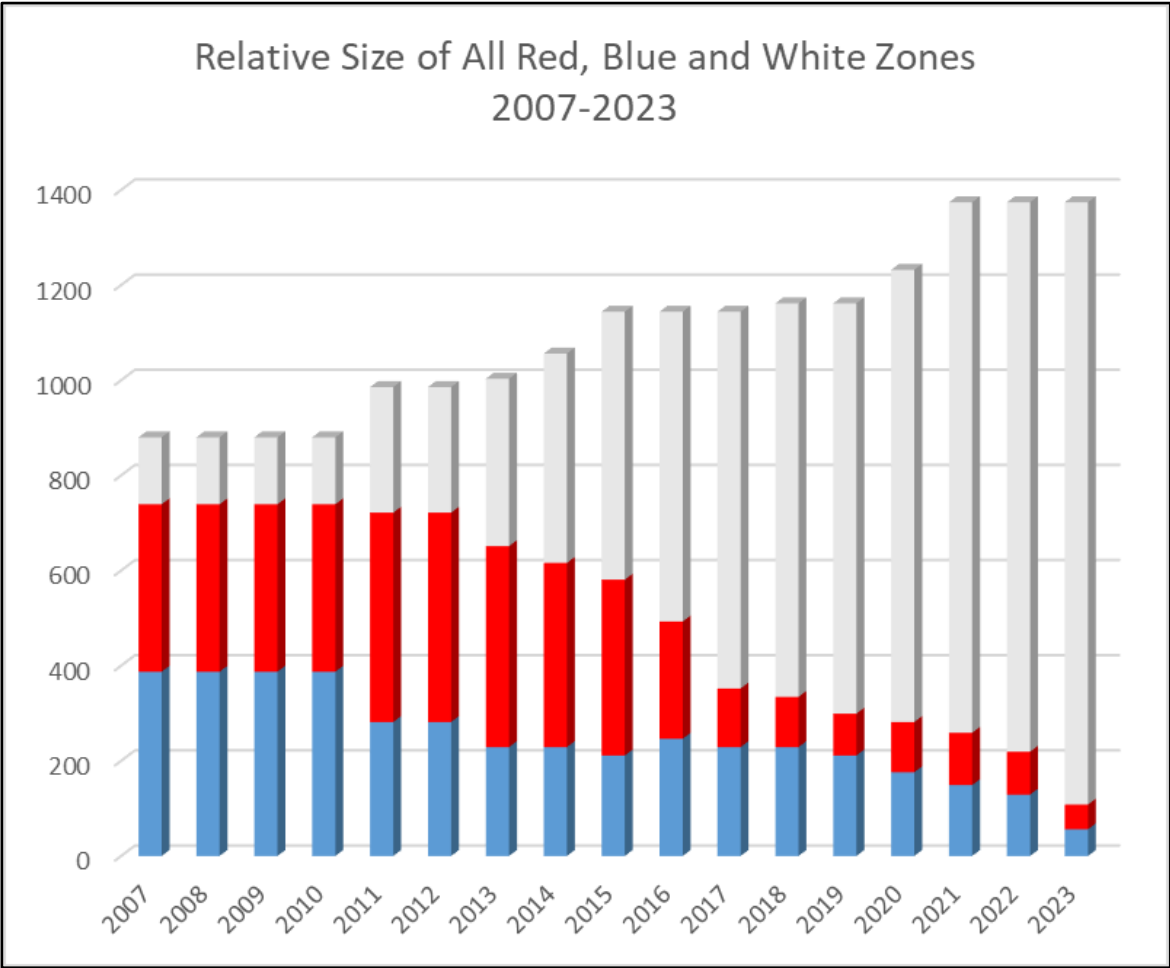


Figure 10. Relative size of all red, blue, and white zones 2007-2023.

**Table 1. Properties that Changed Status\* Between 2022 and 2023**

Woolwich Management Area		
1	432 Woolwich	B → W
2	430 Woolwich	B → W
3	424 Woolwich	B → W
4	431 Woolwich	B → W
5	2 Powell St. E.	B → W
6	416 Woolwich	B → W
7	414 Woolwich	B → W
8	410 Woolwich	B → W
9	406 Woolwich	B → W
10	400 Woolwich	B → W
11	93 Dufferin	B → W
12	14 Marcon	B → W
13	13 Marcon	B → W
14	198 Cardignsn	B → W
15	175 Cardigan	B → W
16	169 Cardigan	B → W
17	167 Cardigan	B → W
18	165 Cardigan	B → W
19	25-27 London Rd. E	B → W
20	29 London Rd. E.	B → W
21	31 London Rd. E.	B → W
22	33 London Rd. E.	B → W
23	122 Cardigan	B → W
24	110 Cardigan	B → W
25	108 Cardigan	B → W
26	104 Cardigan	B → W
27	98 Cardigan	B → W
28	96 Cardigan	B → W
29	92 Cardigan	B → W
30	90 Cardigan	B → W
31	60 Cardigan	B → W
32	54 Cardigan	B → W
33	33 Cardigan	B → W
34	40 Norwich E.	B → W
35	14 Powell	B → W
36	16 Powell	B → W
37	18 Powell	B → W
38	20 Powell	B → W
39	24 Powell	B → W
40	26 Powell	B → W
41	30 Powell	B → W
42	128 Dufferin	B → W

Woowich Management Area		
43	9 John	B → W
44	125 Dufferin	B → W
45	123 Dufferin	B → W
46	2 Pipe	B → W
47	12 Pipe	B → W
48	16 Pipe	B → W
49	385 Woolwich	B → W
50	19 Tiffany St. E.	B → W
51	23 Tiffany St. E.	B → W
52	27 Tiffany St. E.	B → W
53	31 Tiffany St. E.	B → W
54	54 Dufferin	B → W
55	92 Dufferin	B → W
56	90 Dufferin	B → W
57	88 Dufferin	B → W
58	86 Dufferin	B → W
59	31 Dufferin	B → W
60	421 Woolwich	R → B
61	15 Powell E.	R → B
62	19 Powell E.	R → B
63	21 Powell E.	R → B
64	116 Dufferin	R → B
65	112 Dufferin	R → B
66	110 Dufferin	R → B
67	32 Tiffany St. E	R → B
68	28 Tiffany St. E.	R → B
69	22 Tiffany St. E.	R → B
70	2 Tiffany St. E.	R → B
71	109 Dufferin	R → B
72	113 Dufferin	R → B
73	115 Dufferin	R → B
74	11 Pipe	R → B
75	17 Pipe	R → B
76	19 Pipe	R → B
77	21 Pipe	R → B
78	62 Tiffany E.	R → B
79	61 Tiffany E.	R → B
80	59 Tiffany E	R → B
81	101 Dufferin	R → B
82	99 Dufferin	R → B
83	95 Dufferin	R → B

John Galt Park Management Area		
1	99 Woolwich	B → W
2	74 Woolwich	B → W
3	50 Woolwich	B → W
4	15 Woolwich	B → W
5	75 Woolwich	R → B
6	69 Woolwich	R → B
7	67 Woolwich	R → B
8	63 Woolwich	R → B
9	35 Woowich (part)	R → B

King St. Management Area		
1	49 King St.	B → R

\* Blue to White = B → W

Red to Blue = R → B

Blue to Red = B → R

**Table 2. Number of Active Properties Per Red Zone (2007-2022)**

No.	Sector No.	Year																2022 Status
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
1	2	4	4	4	4	6	3	1	2	1	1	1	0	0	0	0	0	0
2	3				0	2	2	1	0	0	0	0	0	0	0	0	0	0
3	7	17	23	23	25	25	24	14	4	0	0	0	0	0	0	0	0	0
4	8	3	6	5	7	5	3	1	0	0	0	0	0	0	0	0	0	0
5	10			4	4	5	4	4	5	4	2	1	0	0	0	0	0	0
6	12	0	3	4	4	1	3	1	0	1	0	0	0	0	0	0	0	0
7	15	4	7	8	13	12	10	4	1	1	1	1	0	1	0	1	0	0
8	16	8	6	4	6	3	6	7	2	1	1	2	1	1	0	1	1	1
9	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	20	1	2	6	4	6	2	0	0	0	0	0	0	0	0	0	0	0
11	21	1	1	1	1	1	2	1	1	0	0	2	0	2	0	1	0	0
12	22	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
13	23	3	2	2	1	3	2	1	0	0	0	0	0	0	0	0	0	0
14	24	1	0	1	3	4	4	0	1	0	0	1	0	1	0	1	0	0
15	25	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	27	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
17	30	4	2	2	3	2	0	0	0	0	0	0	0	1	0	0	0	0
18	36	2	1	1	2	2	2	1	0	2	0	1	2	0	1	0	0	0
19	37	3	3	4	4	6	6	5	0	0	0	0	0	0	0	0	0	0
20	41	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
21	42	0	1	1	1	0	2	2	0	1	0	0	0	0	0	0	0	0
22	47	13	12	14	18	21	12	0	0	0	0	0	0	0	0	0	0	0
23	52				0	0	0	12	11	12	7	1	2	0	0	0	0	1
24	57								5	4	2	1	2	1	0	1	0	0
25	61														34	31	11	
<b>Totals</b>		<b>68</b>	<b>77</b>	<b>87</b>	<b>100</b>	<b>104</b>	<b>88</b>	<b>55</b>	<b>32</b>	<b>27</b>	<b>14</b>	<b>11</b>	<b>8</b>	<b>8</b>	<b>35</b>	<b>36</b>	<b>13</b>	

- 2007 Initiation of comprehensive control program
- 2008-2009 Entomopathogenic nematode treatments
- 2019-2016 Trap-Treat-Release with Zinc Borate
- 2017-2021 Nematodes, borate rods, and spot chemical treatments
- Sectors unknown to have termite activity
- Sectors known to have termite activity and monitored
- Sectors with no activity in 2022
- Sectors with low activity in 2022
- Sectors with increased activity in 2022
- Sectors with 10 or more active properties in 2022

**Table 3. Number of Termites Trapped Per Red Zone (2007-2022)**

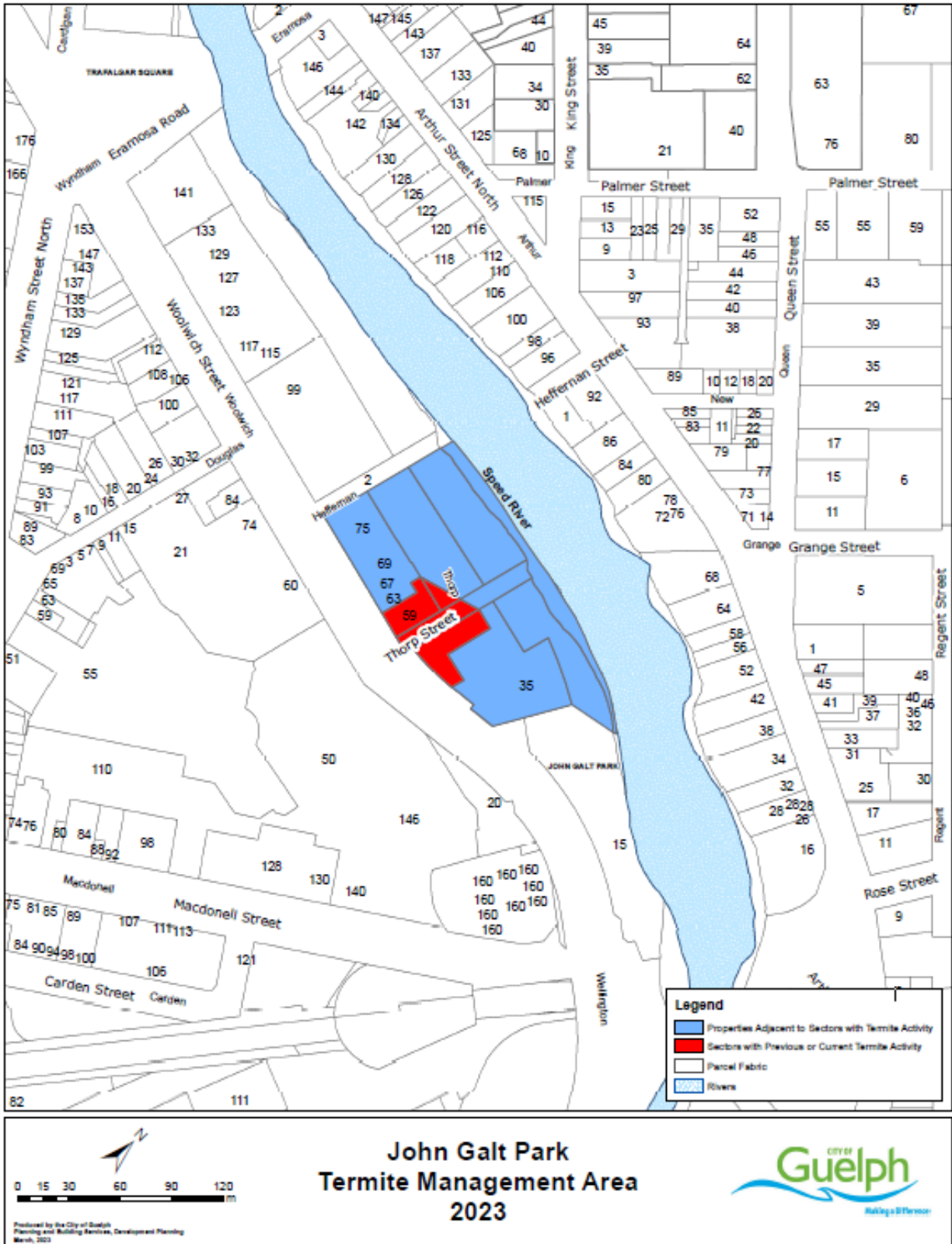
No.	Sector No.	Year																2022 Status
		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
1	2	2,069	100,316	43,297	117,978	73,541	32,377	5,721	7,244	0	0	9	0	0	0	0	0	
2	3					2,864	10,128	3,479	0	0	0	0	0	0	0	0	0	
3	7	8,112	307,782	246,585	389,776	298,183	223,814	178,614	12,459	0	0	0	0	0	0	0	0	
4	8	1,838	37,295	13,120	33,383	10,596	18,687	300	0	0	0	0	0	0	0	0	0	
5	10	0	0	1,133	13,293	15,275	9,163	6,837	2,515	12,869	3,655	896	0	105	0	0	0	
6	12	0	279	11,923	8,485	50	4,693	3	0	2,810	0	0	0	0	0	0	0	
7	15	4,186	16,753	16,221	32,430	29,633	32,039	15,814	50	793	3	1,000	1,621	174	0	1,179	0	
8	16	2,817	23,061	5,573	32,269	19,816	18,329	21,052	1,974	45	95	982	0	3,488	0	0	983	
9	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10	20	0	26,610	31,406	70,521	35,309	21,395	0	0	0	0	0	0	0	0	0	0	
11	21	0	1,603	0	25	434	724	0	10,950	0	0	3,525	45	97	0	2,814	0	
12	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
13	23	0	15,742	4,231	1,241	4,131	969	2,596	0	0	0	0	0	0	0	0	0	
14	24	0	0	1,245	2,375	9,467	19,020	0	71	0	0	2,551	0	3,673	0	4,786	0	
15	25	1,848	3,985	3,934	0	0	0	0	0	0	0	0	0	0	0	0	0	
16	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17	30	0	0	395	1,042	0	0	0	0	0	0	0	0	0	0	0	0	
18	36	0	3,542	3,513	0	4,806	6,048	3,758	0	5,219	0	15,060	350	10	0	0	0	
19	37	0	6,590	4,521	10,121	22,887	19,418	15,286	0	0	0	0	0	0	0	0	0	
20	41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
21	42	0	1,520	1,693	741	0	10,519	889	0	239	0	0	0	0	0	0	0	
22	47	1,333	160,183	101,020	215,596	156,801	108,242	0	0	0	0	0	0	0	0	0	0	
23	52	0	0	0	0	0	0	8,793	72,571	63,507	41,500	1,052	12,983	0	0	0	72	
24	57	0	0	0	0	0	0	0	193,908	115,956	14,590	13,907	4,783	60	0	7,659	0	
25	61	0	0	0	0	0	0	0	0	0	0	0	0	0	388,077	151,281	58,114	
<b>Totals</b>		<b>22203</b>	<b>705,261</b>	<b>489,810</b>	<b>929,236</b>	<b>683,793</b>	<b>535,565</b>	<b>263,142</b>	<b>301,742</b>	<b>201,438</b>	<b>59,843</b>	<b>38,982</b>	<b>19,782</b>	<b>7,607</b>	<b>388,077</b>	<b>167,719</b>	<b>59,169</b>	

- 2007 Initiation of comprehensive control program
- 2008-2009 Entomopathogenic nematode treatments
- 2019-2016 Trap-Treat-Release with Zinc Borate
- 2017-2021 Nematodes, borate rods, and spot chemical treatments
- Sectors unknown to have termite activity
- Sectors known to have termite activity and monitored
- Sectors with no activity in 2022
- Sectors with less than 10,000 trapped in 2022
- Sectors with more than 10,000 trapped in 2022
- Sectors with 10 or more active properties in 2022

**Table 4. Termite Inspections by Year and Type**

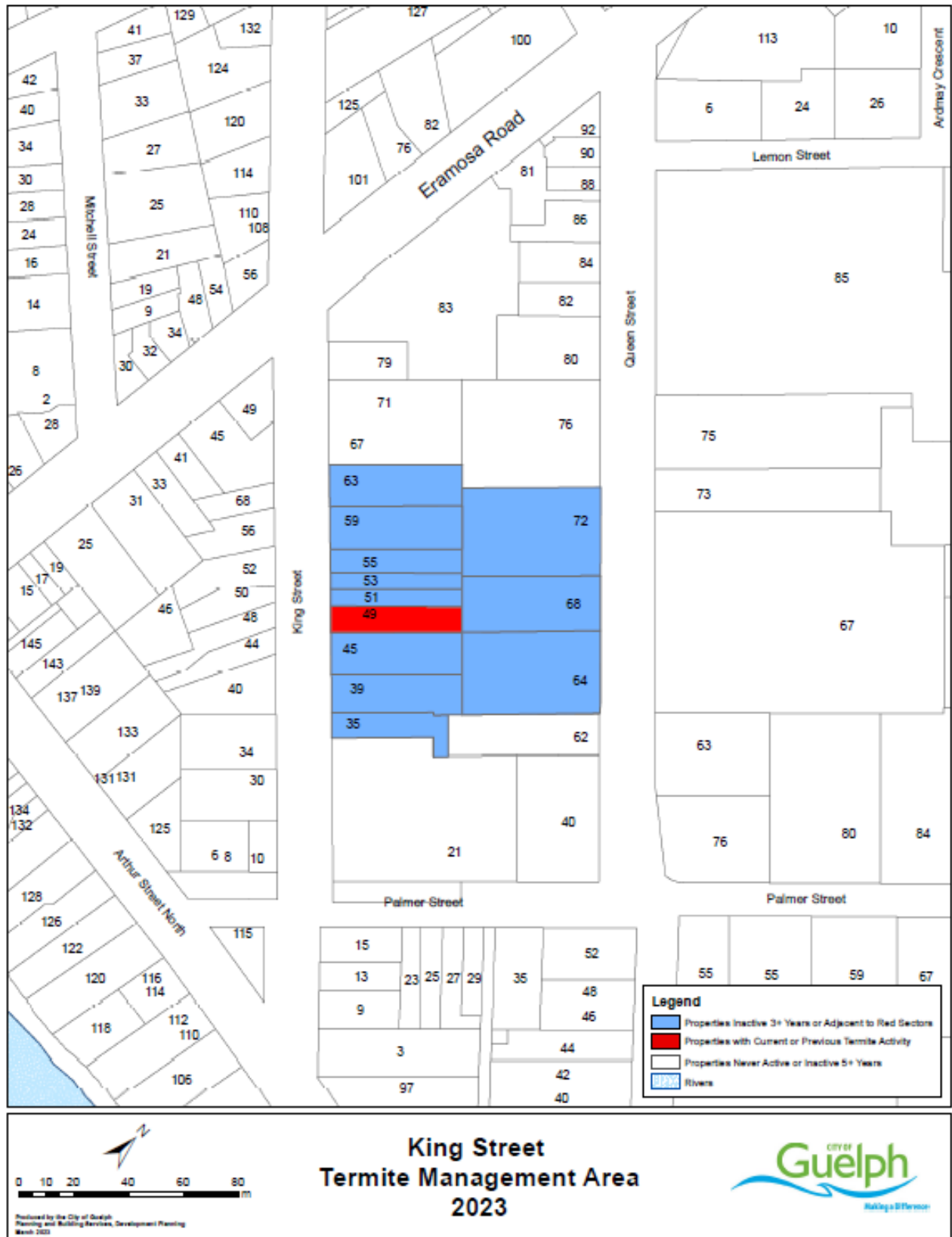
Year	Real Estate	Building Permits	Material Disposal	Total
2007	25	17	100	142
2008	44	19	128	191
2009	40	19	256	315
2010	38	24	156	218
2011	41	48	200	289
2012	18	21	208	247
2013	36	23	253	312
2014	19	18	278	315
2015	29	21	155	205
2016	44	22	177	243
2017	25	42	201	268
2018	25	35	143	203
2019	12	20	95	127
2020	13	9	66	88
2021	4	3	33	40
2022	3	6	30	39



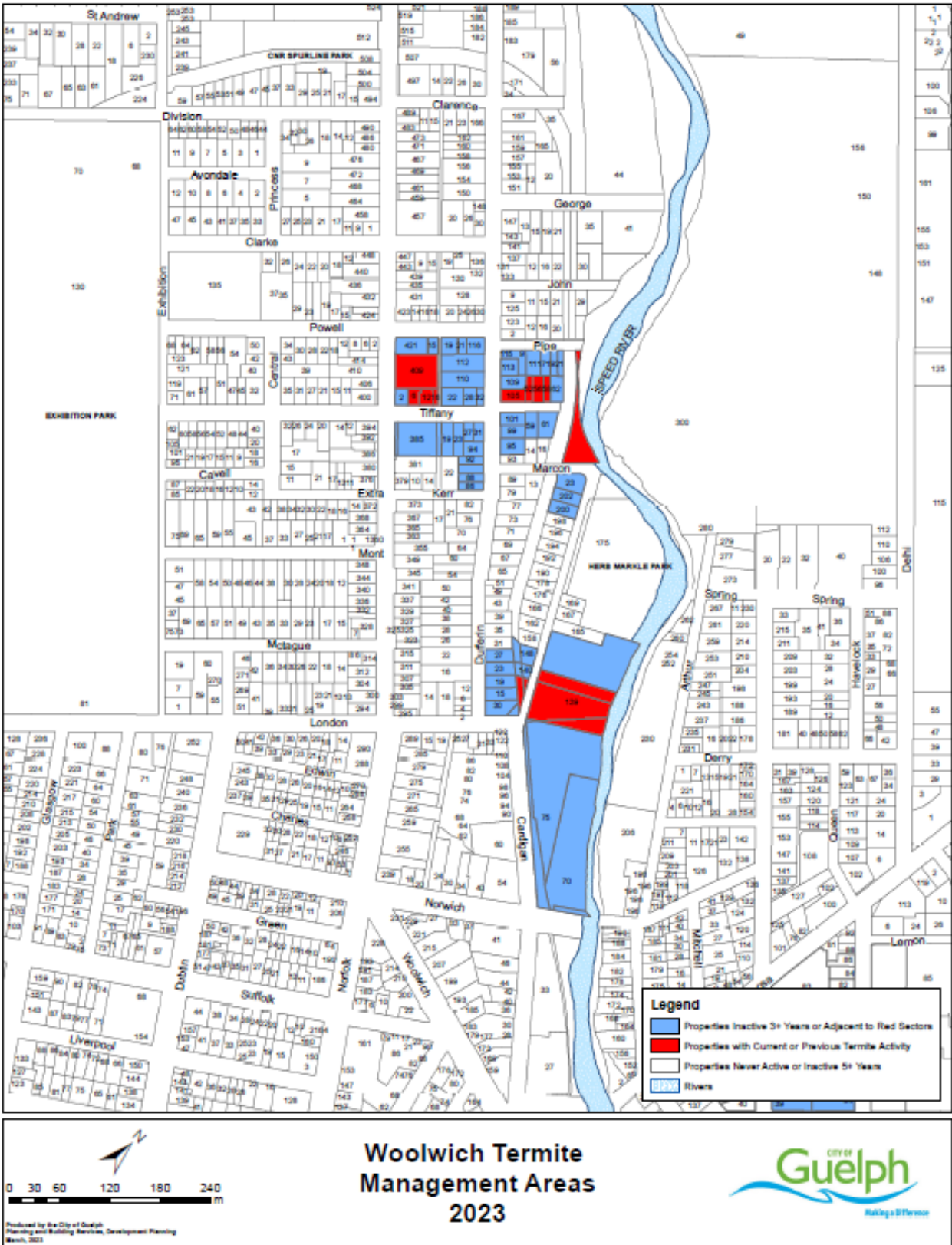


Appendix 2. Boundaries of the John Galt Park Termite Management Area for 2023.





Appendix 3. Boundaries of the King Street Termite Management Area for 2023.



Appendix 4. New boundaries of the Woolwich Termite Management Area for 2023.