

**Invasive Plant Inventory  
In Parks and Protected Areas  
Of the  
Okanagan Region**

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Environmental Stewardship Division

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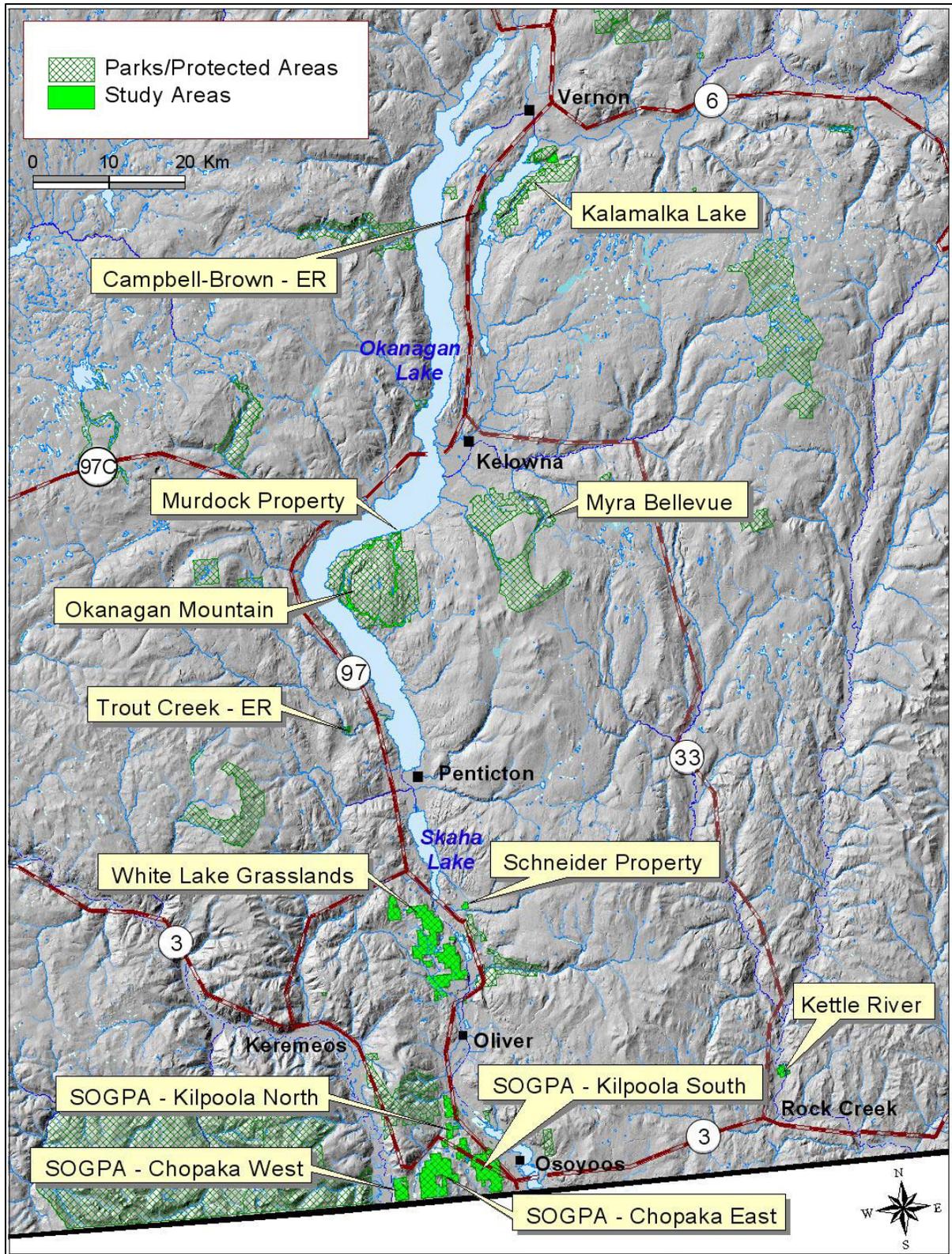
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## Introduction

The Okanagan Region governs more than 330,000 hectares of park, protected areas, ecological reserves and The Nature Trust of BC leaseback lands. The diversity of ecosystems that occur within these lands, support many of British Columbia's identified species at risk. However, the introduction of various invasive plant species has severely threatened the integrity of these ecosystems.

In response to this threat, the Okanagan Region Invasive Plant Program developed and implemented invasive plant management strategies, which require inventory and monitoring of invasive plant infestations.

This project was designed to generate baseline mapping information of invasive plant infestations within specified areas of identified parks, protected areas, ecological reserves and The Nature Trust of BC leaseback lands. These lands are illustrated in the Overview Map (Figure 1), and listed below as follows:

- Myra Bellevue Provincial Park
- Okanagan Mountain Provincial Park
- Murdock Property (Leaseback Land)
- Kettle River Provincial Park
- Trout Creek Ecological Reserve
- Kalamalka Lake Provincial Park
- Campbell-Brown Ecological Reserve
- Schneider Property (Lease-Back Land)
- South Okanagan Grasslands Protected Area - *Chopaka East and West*
- South Okanagan Grasslands Protected Area - *Kilpoola North and South*
- White Lake Grasslands Protected Area

This report illustrates the mapped results of invasive plant inventories conducted during September and October of 2006, within select areas of these properties. Maps and associated data tables are presented for each property to allow for sections of this report to be used independently. Each section also provides a brief overview of inventory results and general management recommendations.

## Methods

Invasive plant inventories were conducted (within the aforementioned properties) for all species identified in the Forest and Range Practices Act, BC Weed Control Act, and the Okanagan Region's Pest Management Plan.

Inventories were conducted primarily on foot, however mountain bikes and 4x4 vehicles were used where access permitted, and a boat was used to access lakeshore campsites and trails in Okanagan Mountain Provincial Park.

The British Columbia Forest Service 'Site and Invasive Plant Inventory Record' form (Appendix I) was used in the field to document site characteristics and invasive plant observations. Each observation recorded was assigned a Paper File ID code to link spatial data with the hard copy field forms.

Invasive plant infestations and point observations were recorded using both Trimble Pro XL and Trimble Pro XR differential GPS's, which are capable of acquiring sub-meter accuracy. Point data was collected for invasive plant observations in the field, then downloaded and differentially corrected in Trimble Pathfinder Office (v3.0) before being exported to ArcView v3.2 for analysis and mapping. Point observations that were not grouped into polygon areas were given a 3-meter buffer zone.

Overview maps were produced to provide a large-scale general location for each property surveyed. Invasive Plant Inventory Maps were generated on a smaller scale to identify areas surveyed and invasive plant observations. Each mapped invasive plant observation (polygon / point) was labeled with the assigned Paper File ID code and linked to an accompanied data table to provide more detailed information.

Each data table lists the Paper File ID, survey date, species and distribution codes (for up to 3 species), UTM coordinates, location, biogeoclimatic (BEC) classification, and infestation area in hectares. Appendix II identifies the IAP code index, which defines species and distribution codes.

## Section 1: Myra – Bellevue Provincial Park

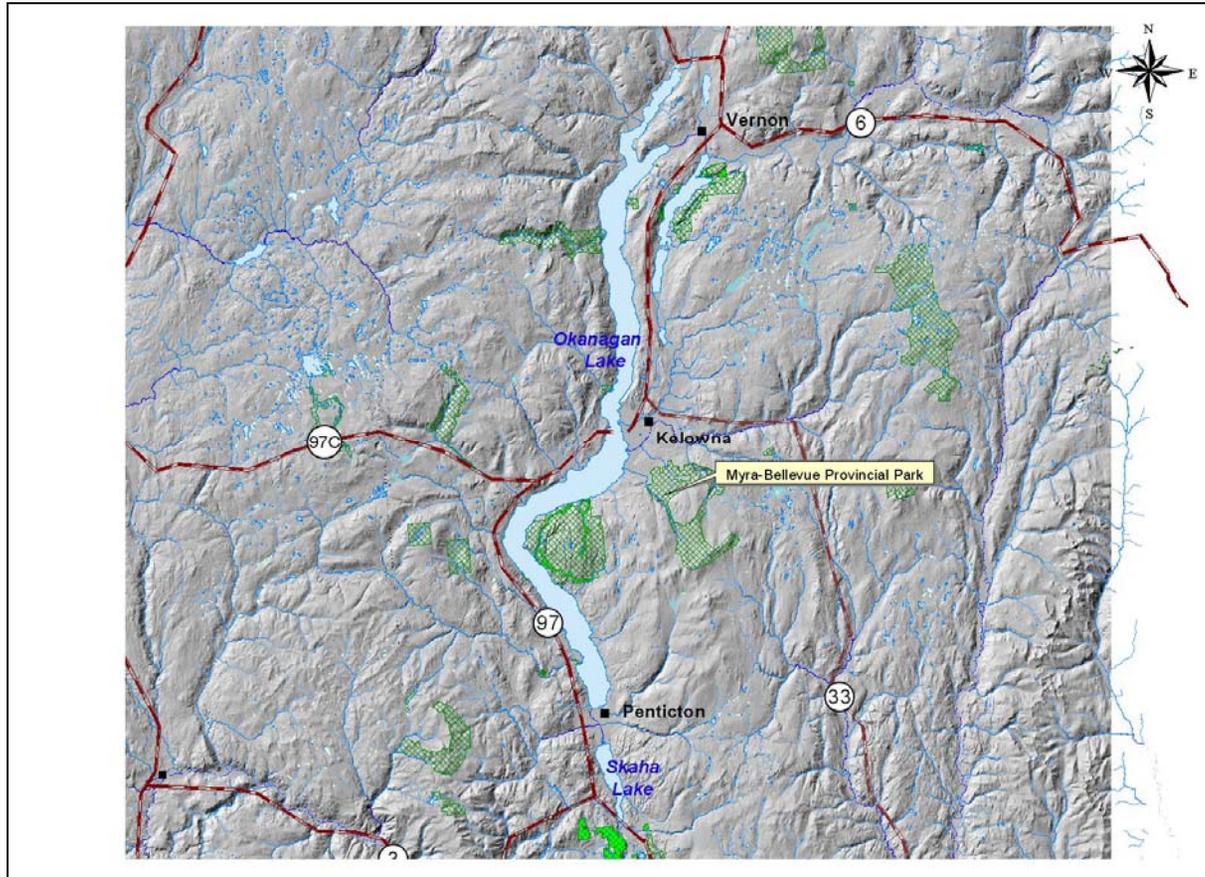


Figure 1-1: Myra-Bellevue Overview

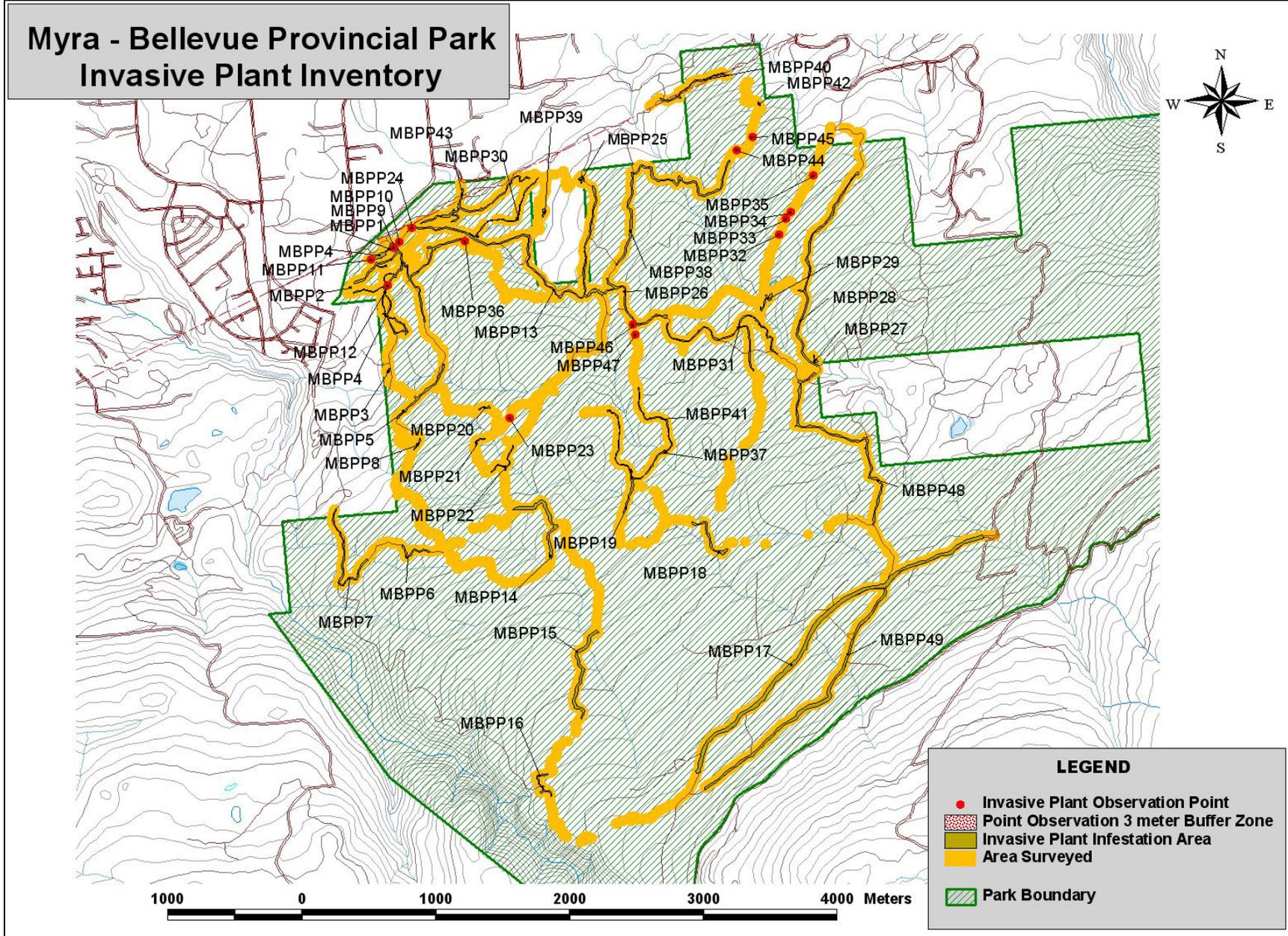


Figure 1-2: Myra-Bellevue Invasive Plant Inventory

Paper File ID	Date	Species 1	Dc 1	Species 2	Dc 2	Species 3	Dc 3	UTM E	UTM N	Location	BEC	Hectares
MBPP1	20060903	SJ	3					324326	5520608	Myra - Bellevue PP	PP xh 1	0.018
MBPP2	20060903	SK	3					324020	5520371	Myra - Bellevue PP	PP xh 1	0.006
MBPP3	20060903	MK	3					324206	5519718	Myra - Bellevue PP	PP xh 1	0.049
MBPP4	20060903	DK	4-6	SC	6			324363	5520616	Myra - Bellevue PP	PP xh 1	3.399
MBPP5	20060903	SC	5-6	DK	2-4			324440	5519513	Myra - Bellevue PP	IDF xh 1	0.733
MBPP6	20060903	SC	6	DK	2			324299	5518333	Myra - Bellevue PP	IDF xh 1	0.283
MBPP7	20060903	SC	4-5					323754	5518179	Myra - Bellevue PP	IDF xh 1	0.865
MBPP8	20060903	SC	2					324365	5519169	Myra - Bellevue PP	IDF xh 1	0.075
MBPP9	20060903	DT	3					324350	5520602	Myra - Bellevue PP	PP xh 1	0.003
MBPP10	20060903	DT	3					324395	5520641	Myra - Bellevue PP	PP xh 1	0.003
MBPP11	20060903	DT	3					324173	5520538	Myra - Bellevue PP	PP xh 1	0.003
MBPP12	20060903	SK	5					324272	5520332	Myra - Bellevue PP	PP xh 1	0.003
MBPP13	20060904	SC	2					325852	5520073	Myra - Bellevue PP	PP xh 1 IDF xh 1	2.709
MBPP14	20060904	SC	3	DK	2			325028	5518560	Myra - Bellevue PP	IDF mw 1	1.463
MBPP15	20060904	SC	2-5					325509	5517559	Myra - Bellevue PP	IDF mw 1	1.498
MBPP16	20060904	SC	2-5					324933	5516435	Myra - Bellevue PP	IDF mw 1	0.281
MBPP17	20060904	SC	4	HA	3			327301	5517542	Myra - Bellevue PP	ICH mk 1	7.673
MBPP18	20060904	SC	5	OD	3	CT	3	326507	5518034	Myra - Bellevue PP	IDF mw 1	0.596
MBPP19	20060904	SC	2-6	OD	2			325896	5518664	Myra - Bellevue PP	IDF xh 1 IDF mw 1	0.465
MBPP20	20060904	SC	5					324837	5519332	Myra - Bellevue PP	IDF xh 1	0.061
MBPP21	20060904	SC	2-3					324848	5519107	Myra - Bellevue PP	IDF xh 1	0.073
MBPP22	20060904	SC	5	DK	5			324861	5518850	Myra - Bellevue PP	IDF xh 1	0.232
MBPP23	20060904	SC	1					325050	5519235	Myra - Bellevue PP	IDF xh 1	0.003
MBPP24	20060904	DT	3					324504	5520733	Myra - Bellevue PP	PP xh 1	0.003
MBPP25	20060909	SC	8					325820	5520914	Myra - Bellevue PP	PP xh 1	0.101
MBPP26	20060909	SC	3	DK	2			326298	5519831	Myra - Bellevue PP	IDF xh 1	0.892
MBPP27	20060909	SC	9					327371	5519344	Myra - Bellevue PP	IDF xh 1	0.081
MBPP28	20060909	SC	5	DK	3	SJ	3	327375	5519340	Myra - Bellevue PP	IDF xh 1	1.809
MBPP29	20060909	SC	7	DK	2	BT	3	327066	5519882	Myra - Bellevue PP	IDF xh 1	0.256
MBPP30	20060909	SC	2					325143	5520716	Myra - Bellevue PP	PP xh 1	0.462
MBPP31	20060909	SC	5					326312	5519701	Myra - Bellevue PP	IDF xh 1	1.301
MBPP32	20060909	SC	2					327216	5520341	Myra - Bellevue PP	IDF xh 1	0.003
MBPP33	20060909	SC	1					327284	5520451	Myra - Bellevue PP	IDF xh 1	0.003

**Table 1-1: Myra-Bellevue Invasive Plant Inventory Data**

Paper File ID	Date	Species_1	Dc_1	Species_2	Dc_2	Species_3	Dc_3	UTM_E	UTM_N	Location	BEC	Hectares
MBPP34	20060909	SC	2					327327	5520495	Myra - Bellevue PP	IDF xh 1	0.003
MBPP35	20060909	SC	1					327529	5520746	Myra - Bellevue PP	IDF xh 1	0.003
MBPP36	20060909	DT	1					324881	5520585	Myra - Bellevue PP	PP xh 1	0.003
MBPP37	20060910	SC	3					326169	5518847	Myra - Bellevue PP	IDF xh 1	0.046
MBPP38	20060910	HA	2	SC	2	TP	1	326099	5520442	Myra - Bellevue PP	PP xh 1 IDF xh 1	2.278
MBPP39	20060910	SC	8					325480	5520695	Myra - Bellevue PP	PP xh 1	0.108
MBPP40	20060910	SC	6	DK	5	SK	3	326972	5521567	Myra - Bellevue PP	PP xh 1	0.539
MBPP41	20060910	SC	2					326051	5518740	Myra - Bellevue PP	IDF xh 1	0.963
MBPP42	20060910	SC	2					327196	5521319	Myra - Bellevue PP	IDF xh 1	0.022
MBPP43	20060910	SC	2-5	DK	2-5			324585	5520761	Myra - Bellevue PP	PP xh 1	1.221
MBPP44	20060910	SC	1					326983	5521005	Myra - Bellevue PP	IDF xh 1	0.003
MBPP45	20060910	SC	1					327110	5521089	Myra - Bellevue PP	IDF xh 1	0.003
MBPP46	20060910	SC	1					326052	5519811	Myra - Bellevue PP	IDF xh 1	0.003
MBPP47	20060910	SC	1					326059	5519738	Myra - Bellevue PP	IDF xh 1	0.003
MBPP48	20060916	BT	2	CT	4	SC	2	327342	5519282	Myra - Bellevue PP	IDF mw 1 IDF xh 1 ICH mk 1	2.219
MBPP49	20060916	SC	2					327580	5517495	Myra - Bellevue PP	ICH mk 1	3.737

**Table 1-1: Myra-Bellevue Invasive Plant Inventory Data**

## ***Myra-Bellevue: Inventory Results and Recommendations***

Five days of invasive plant inventories were conducted through Myra-Bellevue Provincial Park in September of 2006. Inventories through this park focused on priority trails that had existing data, to assess the extent of spread. All other trails were inventoried to expand baseline mapping and data.

Results identified 11 different species (Table 1-2) with widespread distribution of sulphur cinquefoil and diffuse knapweed along trails and old forest service roads. Patches of meadow knapweed and spotted knapweed were also observed (possibly a hybrid sp. as well). Dalmatian toadflax (and toadflax spp) was observed along trails near the park entrance at Stewart Road E. Canada thistle and bull thistle were observed in two different areas. Other observations of concern include oxeye daisy and hoary alyssum.

Recommended management options include:

- Chemical treatment of sulphur cinquefoil along trails and park entrance to reduce spread
- Chemical treatment of spotted knapweed patches
- Ongoing biological treatment and monitoring of diffuse knapweed and Dalmatian toadflax (toadflax sp.)
- Ongoing biological treatment and monitoring of Canada thistle patches
- Manual removal of oxeye daisy and hoary alyssum.

## Section 2: Okanagan Mountain Provincial Park

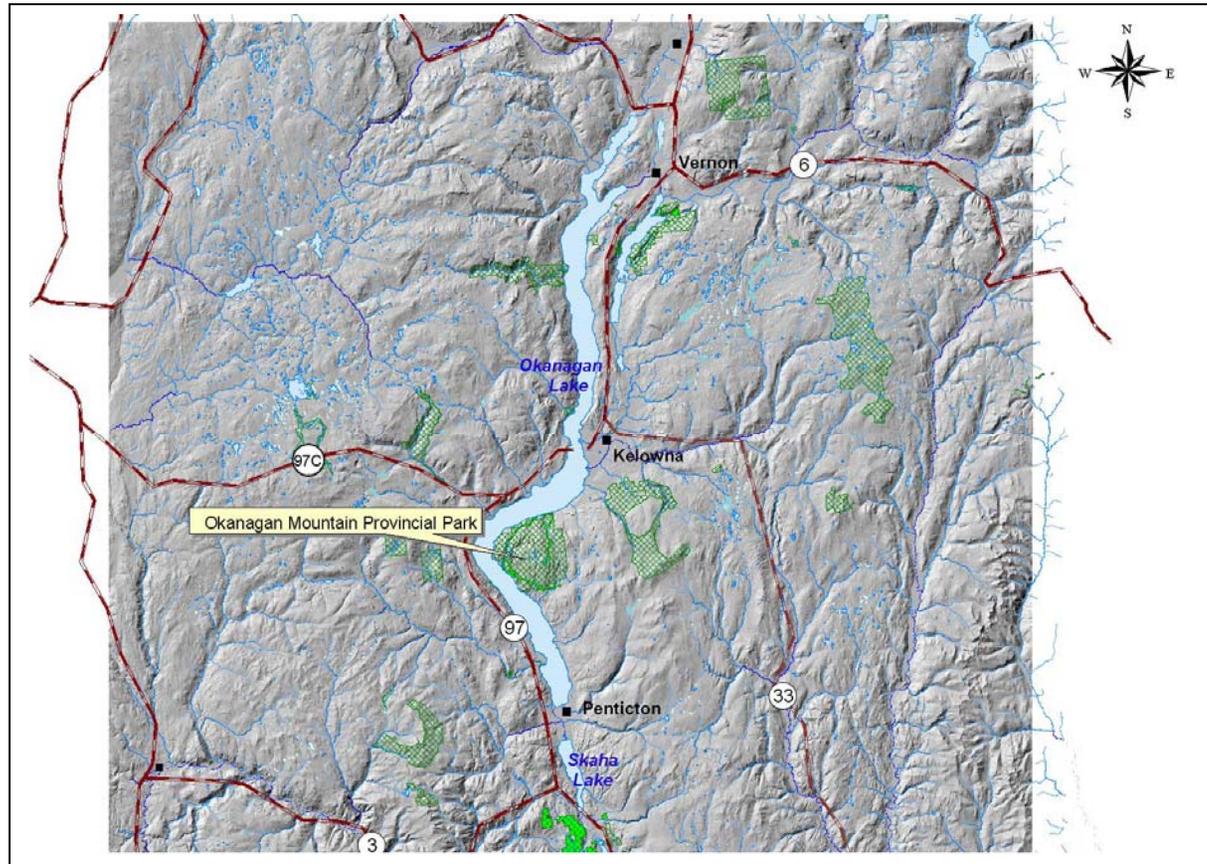


Figure 2-1: Okanagan Mountain Park Overview

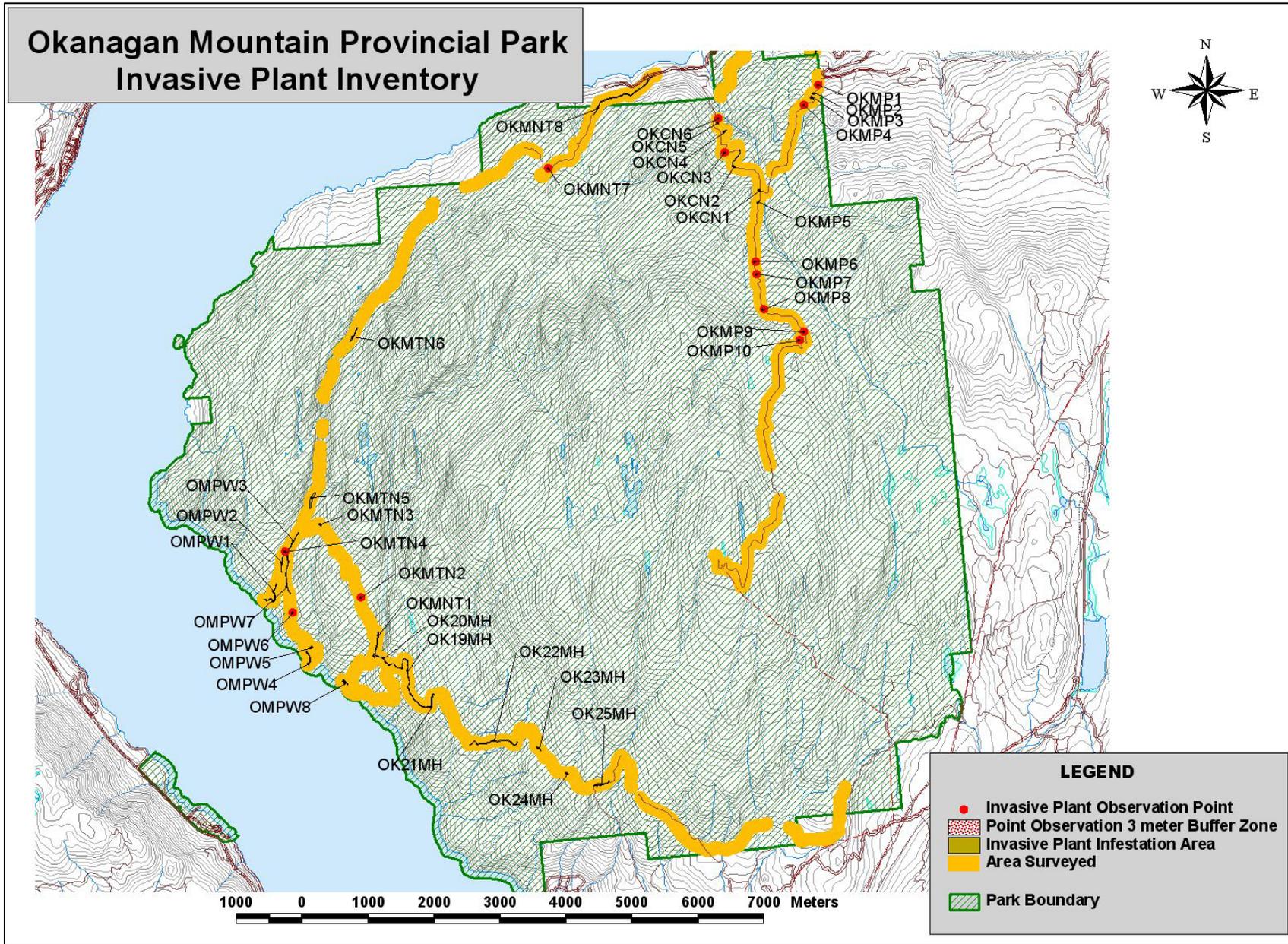


Figure 2-2: Okanagan Mountain Provincial Park Invasive Plant Inventory

Paper File ID	Date	Species_1	Dc_1	Species_2	Dc_2	Species_3	Dc_3	UTM_E	UTM_N	Location	BEC classification(s)	Hectares
OKMNT1	20060917	DK	2					306623	5509048	Okanagan Mnt PP	PP xh 1	0.455
OKMTN2	20060917	DK	2					306536	5509961	Okanagan Mnt PP	PP xh 1	0.003
OKMTN3	20060917	DK	2					306063	5511119	Okanagan Mnt PP	PP xh 1	0.017
OKMTN4	20060917	SC	4					306536	5510791	Okanagan Mnt PP	PP xh 1	0.003
OKMTN5	20060917	SC	1-2	DK	1-2			305935	5511403	Okanagan Mnt PP	PP xh 1	0.742
OKMTN6	20060917	SC	1-3					306847	5513850	Okanagan Mnt PP	PP xh 1	0.209
OKMNT7	20060917	SJ	3					310163	5516064	Okanagan Mnt PP	PP xh 1	0.003
OKMNT8	20060917	SC	4					310953	5517016	Okanagan Mnt PP	PP xh 1	1.113
OK19MH	20060924	SC	3					307059	5508962	Okanagan Mnt PP	PP xh 1	0.131
OK20MH	20060924	DK	4	SC	3			306692	5509040	Okanagan Mnt PP	PP xh 1	1.19
OK21MH	20060924	SC	4					307386	5508195	Okanagan Mnt PP	PP xh 1	0.18
OK22MH	20060924	DK	4	SC	3			307895	5507546	Okanagan Mnt PP	PP xh 1	0.904
OK23MH	20060924	DK	2	SC	2			308899	5507380	Okanagan Mnt PP	PP xh 1	0.062
OK24MH	20060924	SC	3					309303	5506929	Okanagan Mnt PP	PP xh 1	0.023
OK25MH	20060924	SC	3	DK	3			309724	5506675	Okanagan Mnt PP	IDF xh 1	0.151
OMPW1	20060927	DK	4	BT	2			305091	5510111	Okanagan Mnt PP	PP xh 1	0.351
OMPW2	20060927	ST	2					305380	5510506	Okanagan Mnt PP	PP xh 1	0.131
OMPW3	20060927	DK	2-4	SC	5	SJ	3	305415	5510682	Okanagan Mnt PP	PP xh 1	0.141
OMPW4	20060927	DK	2					305619	5509071	Okanagan Mnt PP	PP xh 1	0.081
OMPW5	20060927	CT	3					305693	5509309	Okanagan Mnt PP	PP xh 1	0.039
OMPW6	20060927	CT	3					305475	5509862	Okanagan Mnt PP	PP xh 1	0.003
OMPW7	20060927	DK	2-4	SC	5	SJ	5	305437	5510325	Okanagan Mnt PP	PP xh 1	0.449
OMPW8	20060927	DK	4					306165	5508687	Okanagan Mnt PP	PP xh 1	0.11
OKMP1	20061006	CB	1					314392	5516813	Okanagan Mnt PP	PP xh 1	0.003
OKMP2	20061006	CT	5					314311	5516707	Okanagan Mnt PP	PP xh 1	0.019
OKMP3	20061006	SC	4					314255	5516666	Okanagan Mnt PP	PP xh 1	0.025
OKMP4	20061006	CB	1					314131	5516534	Okanagan Mnt PP	PP xh 1	0.003
OKMP5	20061006	SC	2	CB	2	BT	2	313283	5515191	Okanagan Mnt PP	IDF xh 1	0.022
OKMP6	20061006	CT	3					313107	5514276	Okanagan Mnt PP	IDF dm 1	0.003

**Table 2-1: Okanagan Mountain Provincial Park Invasive Plant Inventory Data**

Paper File ID	Date	Species_1	Dc_1	Species_2	Dc_2	Species_3	Dc_3	UTM_E	UTM_N	Location	BEC classification(s)	Hectares
OKMP7	20061006	CT	3					313099	5514086	Okanagan Mnt PP	IDF dm 1	0.003
OKMP8	20061006	CT	3					313144	5513540	Okanagan Mnt PP	IDF dm 1	0.003
OKMP9	20061006	CT	3					313709	5513127	Okanagan Mnt PP	IDF dm 1	0.003
OKMP10	20061006	CT	3					313627	5513013	Okanagan Mnt PP	IDF dm 1	0.003
OKCN1	20061012	DK	2					313307	5515332	Okanagan Mnt PP	IDF xh 1	0.004
OKCN2	20061012	DK	2	BT	2			313038	5515897	Okanagan Mnt PP	IDF xh 1	0.143
OKCN3	20061012	DK	3					312850	5515977	Okanagan Mnt PP	IDF xh 1	0.003
OKCN4	20061012	DK	4					312918	5516304	Okanagan Mnt PP	PP xh 1 IDF xh 1	0.025
OKCN5	20061012	CB	4					312805	5516419	Okanagan Mnt PP	PP xh 1	0.021
OKCN6	20061012	CB	2					312819	5516498	Okanagan Mnt PP	PP xh 1	0.003

**Table 2-1: Okanagan Mountain Provincial Park Invasive Plant Inventory Data**

### ***Okanagan Mountain Park: Inventory Results and Recommendations***

Five days of invasive plant inventories were conducted through Okanagan Mountain Provincial Park in September and October of 2006. Inventories through this park focused on trails and lakeshore campsite areas. Inventory results identified spaced distributions of diffuse knapweed (possible hybrid sp as well) and sulphur cinquefoil along the Wild Horse Canyon Trail. Patches of St. John's wort were observed near the intersection of the Buchan Bay Trail and the Commando Bay Trail. A couple patches of Canada thistle were recorded along the Commando Bay Trail and a few more patches along the Divide Lake Trail. Other observations of concern include scotch thistle (confirm ID?) and bull thistle on the Buchan Bay Trail; and burdock along sections of the CN Trail and the Divide Lake Trail.

Recommended management options include:

- Chemical treatment of sulphur cinquefoil along sections of Wild Horse Canyon Trail and north trail entrance to reduce spread
- Ongoing biological treatment and monitoring of diffuse knapweed and Canada thistle
- Manual removal of scotch thistle and burdock.

### Section 3: Murdock Property

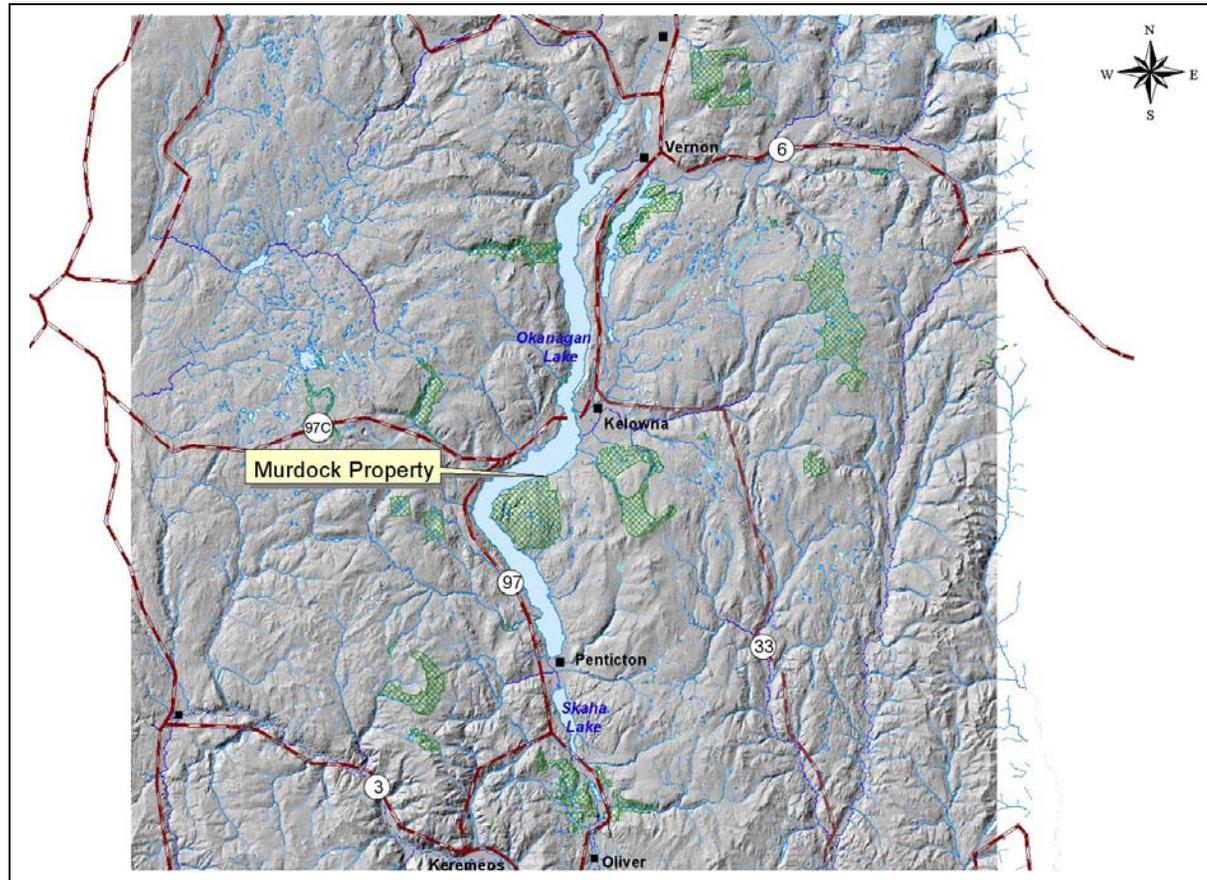


Figure 3-1: Murdock Property Overview

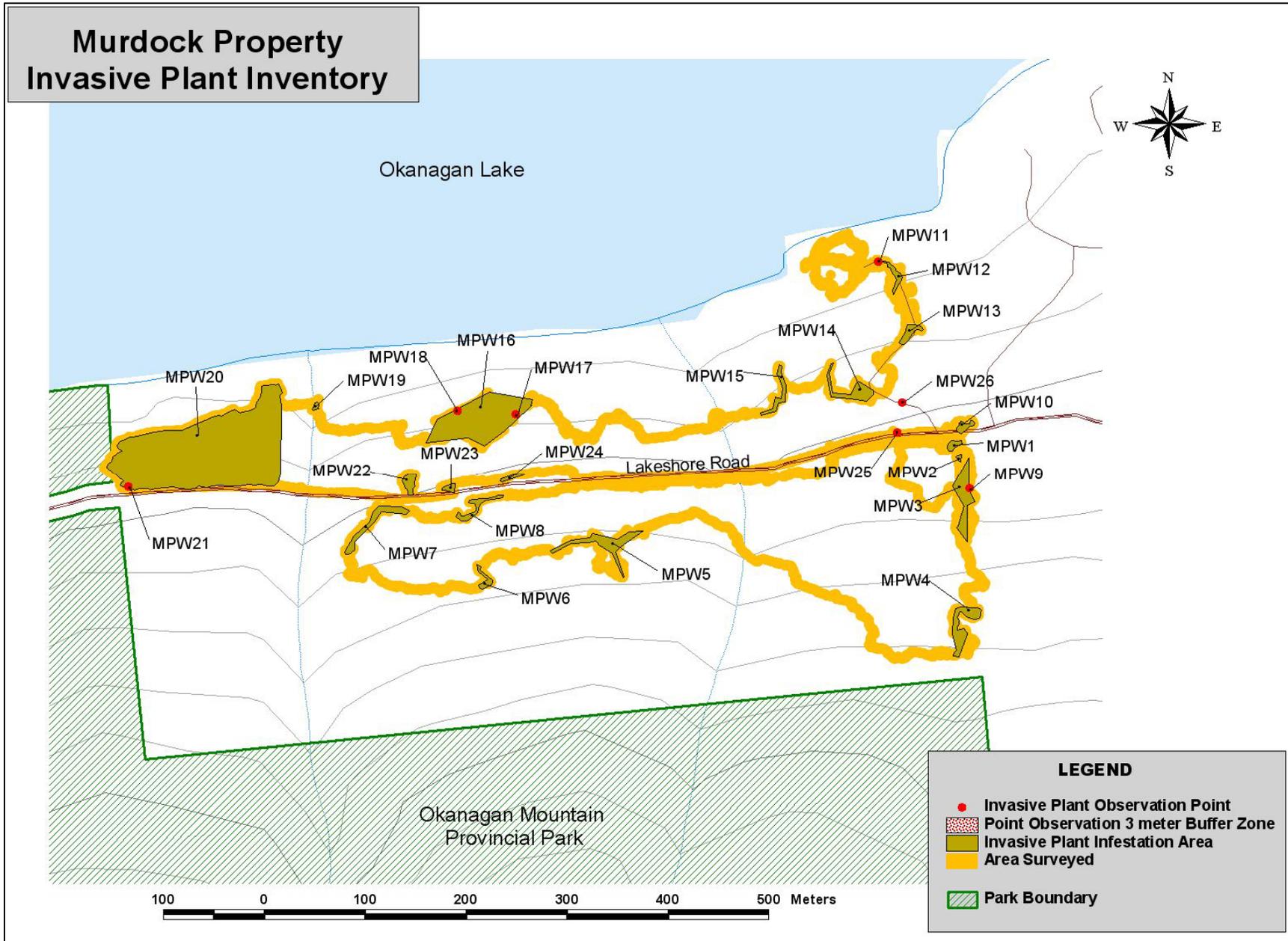


Figure 3-2: Murdock Property Invasive Plant Inventory

Paper File ID	Date	Species_1	Dc_1	Species_2	Dc_2	Species_3	Dc_3	UTM_E	UTM_N	Location	BEC classification(s)	Hectares
MPW1	20060914	DK	4					314427	5517509	Murdock Property	PP xh 1	0.01
MPW2	20060914	CB	2	WC	1			314431	5517494	Murdock Property	PP xh 1	0.002
MPW3	20060914	BT	2					314430	5517446	Murdock Property	PP xh 1	0.07
MPW4	20060914	BT	4	CB	1			314414	5517322	Murdock Property	PP xh 1	0.054
MPW5	20060914	BT	2-4	MU	2			314066	5517461	Murdock Property	PP xh 1	0.067
MPW6	20060914	CT	3	BT	2			313955	5517431	Murdock Property	PP xh 1	0.012
MPW7	20060914	SJ	5	SC	2	DK	2-4	313818	5517478	Murdock Property	PP xh 1	0.047
MPW8	20060914	SJ	5					313930	5517500	Murdock Property	PP xh 1	0.023
MPW9	20060914	HA	3					314438	5517462	Murdock Property	PP xh 1	0.003
MPW10	20060906	CB	3	BT	2			314433	5517522	Murdock Property	PP xh 1	0.012
MPW11	20060906	BT	1					314375	5517696	Murdock Property	PP xh 1	0.003
MPW12	20060906	SC	4	BT	4			314387	5517691	Murdock Property	PP xh 1	0.015
MPW13	20060906	SC	4	BT	2	CT	2	314395	5517625	Murdock Property	PP xh 1	0.018
MPW14	20060906	BT	5					314340	5517581	Murdock Property	PP xh 1	0.045
MPW15	20060906	BT	2					314264	5517602	Murdock Property	PP xh 1	0.024
MPW16	20060906	BT	4					314017	5517604	Murdock Property	PP xh 1	0.309
MPW17	20060906	SC	1					314001	5517591	Murdock Property	PP xh 1	0.003
MPW18	20060906	DK	1					313944	5517602	Murdock Property	PP xh 1	0.003
MPW19	20060906	PS	3					313806	5517627	Murdock Property	PP xh 1	0.003
MPW20	20060906	SJ	6	DT	2-5	BT	2	313770	5517639	Murdock Property	PP xh 1	1.107
MPW21	20060906	SC	1					313611	5517568	Murdock Property	PP xh 1	0.003
MPW22	20060906	SJ	2	SC	2	BT	2	313890	5517520	Murdock Property	PP xh 1	0.02
MPW23	20060906	SC	2	DT	1	BC	1	313930	5517527	Murdock Property	PP xh 1	0.007
MPW24	20060906	SC	2	SJ	3			313979	5517528	Murdock Property	PP xh 1	0.008
MPW25	20060906	PS	1					314373	5517527	Murdock Property	PP xh 1	0.003
MPW26	20060906	SC	2					314382	5517556	Murdock Property	PP xh 1	0.003

**Table 3-1: Murdock Property Invasive Plant Inventory Data**

## ***Murdock Property: Inventory Results and Recommendations***

Two days of invasive plant inventories were conducted through the Murdock Property in September of 2006. Inventories focused on a complete inventory for this property. The results identified 11 different invasive plant species. Only a couple areas within the property were found to support sporadic diffuse knapweed growth. Burdock was observed on both sides of Lakeshore Road at the eastern boundary of the property. White cockle and hoary alyssum were observed above the road near the eastern boundary as well. Patches of St. John's wort were established in the open areas near the western boundary, mixed with patches of Dalmatian toadflax below the road. Sporadic sulphur cinquefoil distributions were observed primarily along the trail down to Okanagan Lake and in open areas along Lakeshore Road. A single bladder campion plant was also observed along the roadside. Bull thistle occurred sporadically throughout the property. One patch of Canada thistle and a couple perennial sow thistle observations were also recorded. Other notes for the area included infestations of spiny lettuce, which was not mapped.

Recommended management options include:

- Chemical spot-treatment of sulphur cinquefoil along the lake trail and open areas along Lakeshore Road
- Ongoing biological treatment and monitoring of St. John's wort, Dalmatian toadflax and Canada thistle
- Manual removal of burdock, diffuse knapweed, hoary alyssum, perennial sow thistle, bladder campion, and white cockle.

## Section 4: Kettle River Provincial Park

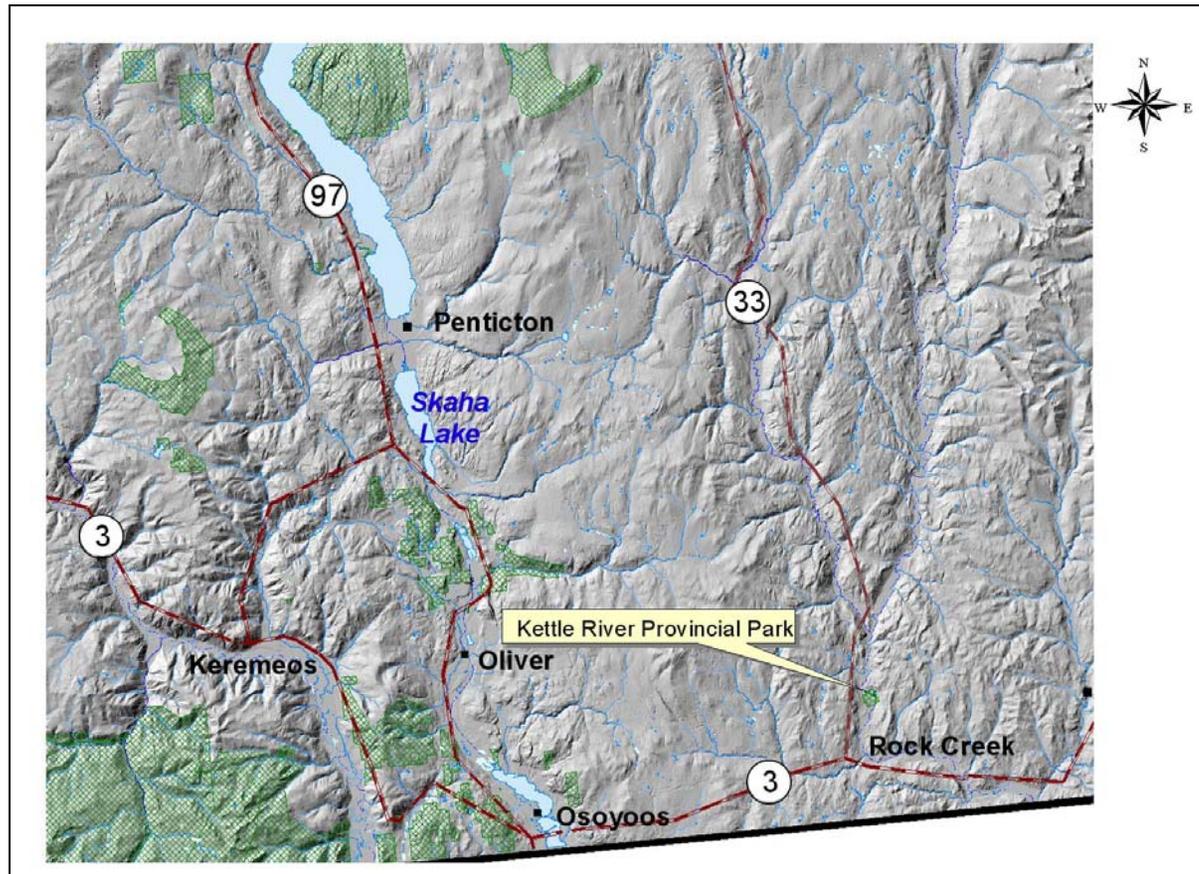


Figure 4-1: Kettle River Provincial Park Overview

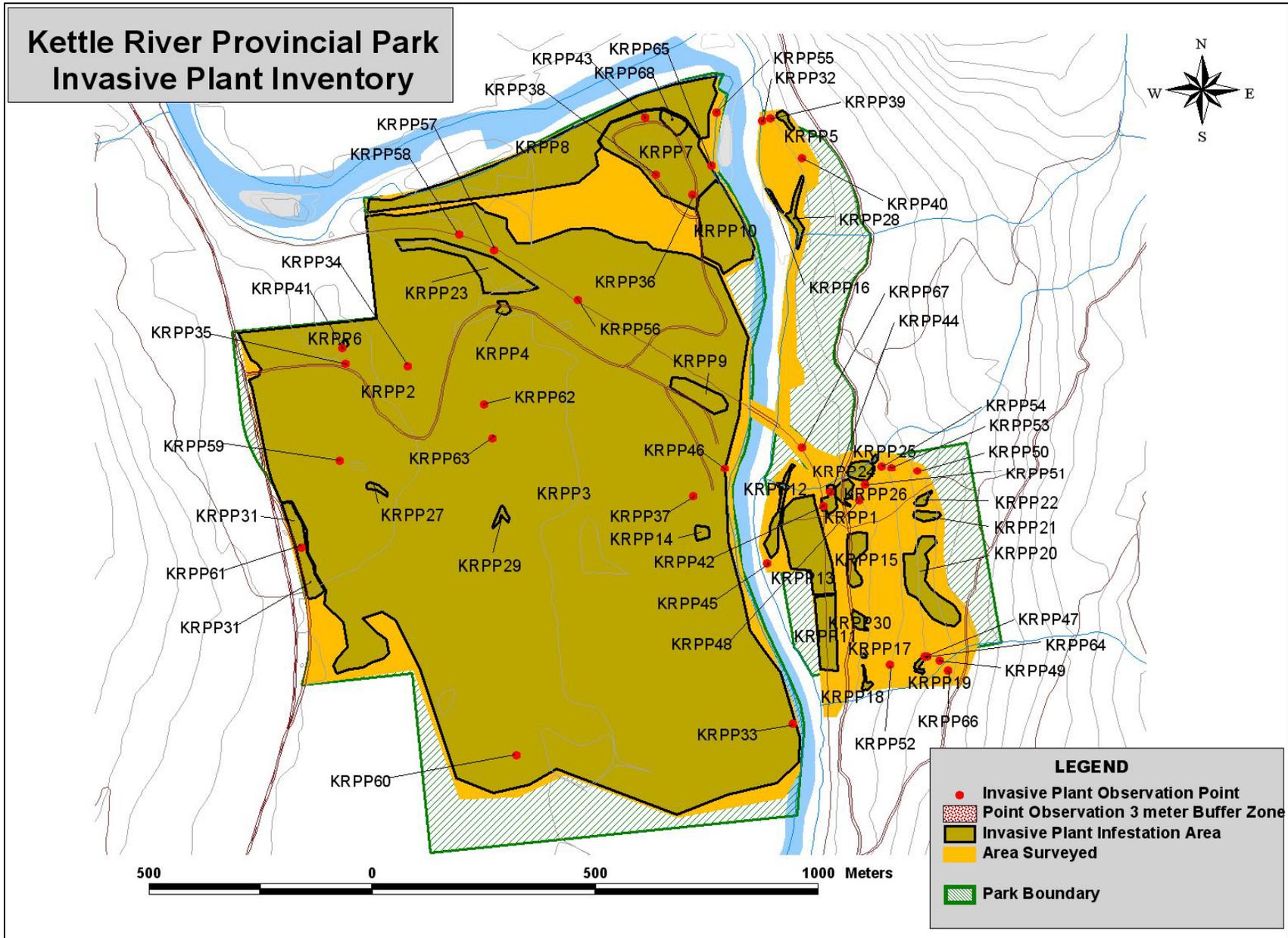


Figure 4-2: Kettle River Provincial Park Invasive Plant Inventory

Paper File ID	Date	Species_1	Dc_1	Species_2	Dc_2	Species_3	Dc_3	UTM_E	UTM_N	Location	BEC classification(s)	Hectares
KRPP1	20061002	SC	5	DK	7	WM	5	355697	5441364	Kettle River PP	IDF xh 1	0.148
KRPP2	20061002	HT	5	BT	3			354762	5441735	Kettle River PP	IDF xh 1	1.473
KRPP3	20061002	SJ	6	DK	5			355101	5441648	Kettle River PP	IDF xh 1	115.285
KRPP4	20061002	DT	3	SJ	8	DK	4	355028	5441894	Kettle River PP	IDF xh 1	0.068
KRPP5	20061002	DK	2	FH	3	MU	4	355702	5442240	Kettle River PP	IDF xh 1	0.064
KRPP6	20061002	ST	3	HT	3	SJ	6	354663	5441858	Kettle River PP	IDF xh 1	0.023
KRPP7	20061002	CT	5	HT	4	CB	2	355413	5442204	Kettle River PP	IDF xh 1	3.284
KRPP8	20061002	HT	2					355208	5442251	Kettle River PP	IDF xh 1	5.112
KRPP9	20061002	CT	5	HT	2	BT	2	355439	5441638	Kettle River PP	IDF xh 1	0.495
KRPP10	20061002	HT	4	DK	2	BT	2	355515	5441990	Kettle River PP	IDF xh 1	1.654
KRPP11	20061002	DT	5	DK	4	MU	2	355650	5441062	Kettle River PP	IDF xh 1	0.708
KRPP12	20061002	CT	6	HT	4	BT	2	355570	5441337	Kettle River PP	IDF xh 1	0.307
KRPP13	20061002	DK	7	SJ	5			355621	5441336	Kettle River PP	IDF xh 1	1.635
KRPP14	20061002	ST	3	CT	3	BT	3	355403	5441335	Kettle River PP	IDF xh 1	0.088
KRPP15	20061003	CT	5	SJ	5	DK	4	355736	5441245	Kettle River PP	IDF xh 1	0.37
KRPP16	20061003	SJ	2					355656	5442060	Kettle River PP	IDF xh 1	0.036
KRPP17	20061003	SJ	3	SC	2			355728	5441017	Kettle River PP	IDF xh 1	0.008
KRPP18	20061003	CT	3	DK	2	BT	2	355727	5440950	Kettle River PP	IDF xh 1	0.044
KRPP19	20061003	SC	2	CT	4	BT	2	355846	5440972	Kettle River PP	IDF xh 1	0.042
KRPP20	20061003	SJ	5	DK	4	WM	5	355869	5441172	Kettle River PP	IDF xh 1	1.03
KRPP21	20061003	DK	5	MU	2			355904	5441310	Kettle River PP	IDF xh 1	0.103
KRPP22	20061003	SJ	3	DK	2	MU	2	355901	5441345	Kettle River PP	IDF xh 1	0.063
KRPP23	20061003	HT	2-4					354993	5442004	Kettle River PP	IDF xh 1	1.116
KRPP24	20061003	SJ	5	DK	4			355775	5441430	Kettle River PP	IDF xh 1	0.216
KRPP25	20061003	CT	4	MU	4			355809	5441454	Kettle River PP	IDF xh 1	0.017
KRPP26	20061003	DK	7	SJ	5	SC	3	355733	5441392	Kettle River PP	IDF xh 1	0.156
KRPP27	20061003	HT	7					354694	5441527	Kettle River PP	IDF xh 1	0.055
KRPP28	20061003	CT	5	HT	4	SJ	3	355694	5442019	Kettle River PP	IDF xh 1	0.192
KRPP29	20061003	HT	3					354968	5441437	Kettle River PP	IDF xh 1	0.062

**Table 4-1: Kettle River Provincial Park Invasive Plant Inventory Data**

Paper File ID	Date	Species_1	Dc_1	Species_2	Dc_2	Species_3	Dc_3	UTM_E	UTM_N	Location	BEC classification(s)	Hectares
KRPP30	20061003	DK	4	SJ	5	SC	3	355729	5441090	Kettle River PP	IDF xh 1	0.104
KRPP31	20061003	CT	3	HT	2	BT	2	354514	5441393	Kettle River PP	IDF xh 1	0.609
KRPP32	20061002	SJ	3					355654	5442236	Kettle River PP	IDF xh 1	0.003
KRPP33	20061002	HT	1					355552	5440884	Kettle River PP	IDF xh 1	0.003
KRPP34	20061002	SC	1					354798	5441791	Kettle River PP	IDF xh 1	0.003
KRPP35	20061002	SC	3	HT	3			354661	5441813	Kettle River PP	IDF xh 1	0.003
KRPP36	20061002	BT	1	HT	4			355478	5442091	Kettle River PP	IDF xh 1	0.003
KRPP37	20061002	ST	3	HT	1			355395	5441417	Kettle River PP	IDF xh 1	0.003
KRPP38	20061002	BT	1					355403	5442146	Kettle River PP	IDF xh 1	0.003
KRPP39	20061002	HT	1					355673	5442240	Kettle River PP	IDF xh 1	0.003
KRPP40	20061002	HT	2					355731	5442142	Kettle River PP	IDF xh 1	0.003
KRPP41	20061002	SK	3					354658	5441848	Kettle River PP	IDF xh 1	0.003
KRPP42	20061002	HA	3	DK	4			355681	5441360	Kettle River PP	IDF xh 1	0.003
KRPP43	20061002	BT	1					355394	5442277	Kettle River PP	IDF xh 1	0.003
KRPP44	20061002	SJ	3	DK				355699	5441388	Kettle River PP	IDF xh 1	0.003
KRPP45	20061002	SJ	2					355540	5441247	Kettle River PP	IDF xh 1	0.003
KRPP46	20061002	CT	2					355473	5441473	Kettle River PP	IDF xh 1	0.003
KRPP47	20061003	BT	1					355863	5440997	Kettle River PP	IDF xh 1	0.003
KRPP48	20061003	BT	2					355762	5441363	Kettle River PP	IDF xh 1	0.003
KRPP49	20061003	SJ	1					355895	5440983	Kettle River PP	IDF xh 1	0.003
KRPP50	20061003	SJ	1					355899	5441413	Kettle River PP	IDF xh 1	0.003
KRPP51	20061003	SC	3					355779	5441396	Kettle River PP	IDF xh 1	0.003
KRPP52	20061003	CT	3					355785	5440988	Kettle River PP	IDF xh 1	0.003
KRPP53	20061003	DK	4					355843	5441428	Kettle River PP	IDF xh 1	0.003
KRPP54	20061003	SC	2					355822	5441433	Kettle River PP	IDF xh 1	0.003
KRPP60	20061003	HT	2					354930	5440891	Kettle River PP	IDF xh 1	0.003
KRPP61	20061003	FT	3					354510	5441413	Kettle River PP	IDF xh 1	0.003
KRPP62	20061003	HT	3	BT	3			354957	5441684	Kettle River PP	IDF xh 1	0.003
KRPP55	20061003	SK	2					355553	5442269	Kettle River PP	IDF xh 1	0.003

**Table 4-1: Kettle River Provincial Park Invasive Plant Inventory Data**

Paper File ID	Date	Species_1	Dc_1	Species_2	Dc_2	Species_3	Dc_3	UTM_E	UTM_N	Location	BEC classification(s)	Hectares
KRPP56	20061003	DT	2					355193	5441889	Kettle River PP	IDF xh 1	0.003
KRPP57	20061003	DT	3					355023	5442024	Kettle River PP	IDF xh 1	0.003
KRPP58	20061003	DT	1					354949	5442069	Kettle River PP	IDF xh 1	0.003
KRPP59	20061003	BT	1	WM	3	MU	3	354621	5441598	Kettle River PP	IDF xh 1	0.003
KRPP63	20061003	HT	1					354966	5441607	Kettle River PP	IDF xh 1	0.003
KRPP64	20061003	HT	1					355870	5440997	Kettle River PP	IDF xh 1	0.003
KRPP65	20061003	SJ	3					355528	5442152	Kettle River PP	IDF xh 1	0.003
KRPP66	20061003	SC	3					355911	5440959	Kettle River PP	IDF xh 1	0.003
KRPP67	20061003	DK	4					355649	5441501	Kettle River PP	IDF xh 1	0.003
KRPP68	20061002	CB	5	HT	4	CT	2	355441	5442251	Kettle River PP	IDF xh 1	0.188

**Table 4-1: Kettle River Provincial Park Invasive Plant Inventory Data**

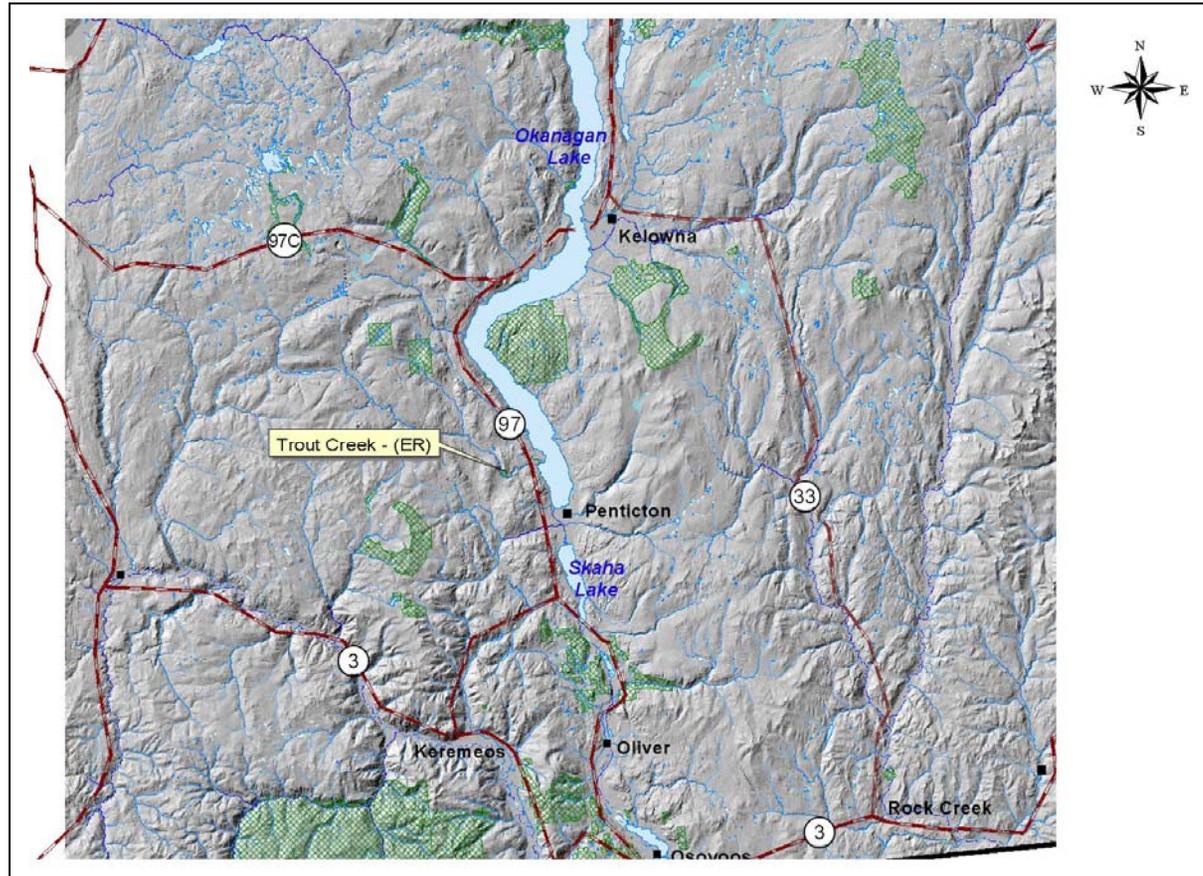
### ***Kettle River Provincial Park: Inventory Results and Recommendations***

Two days (3 man-days) of invasive plant inventories were conducted throughout the Kettle River Provincial Park in October of 2006. Inventories identified large infestations of St. John's wort and diffuse knapweed. Other infestations of concern included sulphur cinquefoil, hoary alyssum, Dalmatian toadflax, hound's-tongue, burdock, bull thistle, scotch thistle (confirm ID) and Canada thistle. Although mustard was mapped as wild mustard (WM), it was likely field mustard or mustard spp.

Recommended management options include:

- Chemical treatment of sulphur cinquefoil patches along KVR and roadside (east side of Kettle River) to reduce spread
- Ongoing biological treatment and monitoring of St. John's wort, diffuse knapweed, hound's-tongue, Dalmatian toadflax and Canada thistle
- Manual removal of burdock, scotch thistle and hoary alyssum

## Section 5: Trout Creek Ecological Reserve



**Figure 5-1: Trout Creek Ecological Reserve Overview**

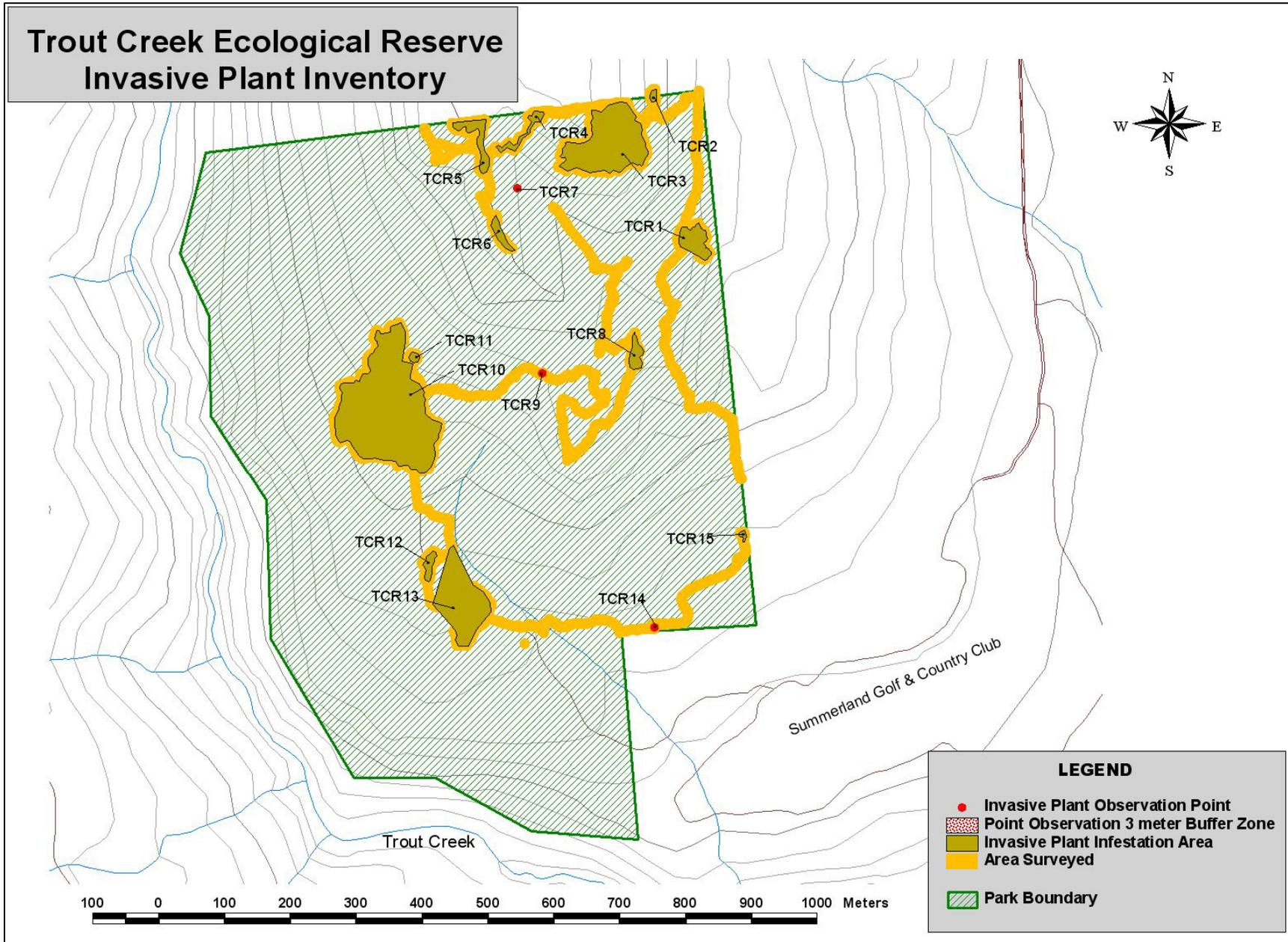


Figure 5-2: Trout Creek Ecological Reserve Invasive Plant Inventory

Paper File ID	Date	Species_1	Dc_1	Species_2	Dc_2	Species_3	Dc_3	UTM_E	UTM_N	Location	BEC classification(s)	Hectares
TCR1	20060905	DT	4					304550	5492966	Trout Creek ER	PP xh 1	0.166
TCR2	20060905	DT	4					304536	5493192	Trout Creek ER	PP xh 1	0.017
TCR3	20060905	DT	4					304496	5493164	Trout Creek ER	PP xh 1	0.901
TCR4	20060905	DT	5	DK	7			304348	5493181	Trout Creek ER	PP xh 1	0.071
TCR5	20060905	DT	3	DK	7			304267	5493169	Trout Creek ER	PP xh 1	0.13
TCR6	20060905	DT	5	DK	4			304278	5493044	Trout Creek ER	PP xh 1	0.057
TCR7	20060905	DT	3					304311	5493082	Trout Creek ER	PP xh 1	0.003
TCR8	20060905	MU	3	BT	2			304455	5492830	Trout Creek ER	PP xh 1	0.077
TCR9	20060905	DK	2					304176	5492789	Trout Creek ER	PP xh 1	0.003
TCR10	20060905	DT	8	DK	7	BT	2	304132	5492797	Trout Creek ER	PP xh 1	2.099
TCR11	20060905	SC	4					304122	5492843	Trout Creek ER	PP xh 1	0.019
TCR12	20060905	DK	7					304100	5492524	Trout Creek ER	PP xh 1	0.049
TCR13	20060905	DT	8					304167	5492475	Trout Creek ER	PP xh 1	0.688
TCR14	20060905	SC	1					304434	5492395	Trout Creek ER	PP xh 1	0.003
TCR15	20060905	DT	5					304581	5492519	Trout Creek ER	PP xh 1	0.011

**Table 5-1: Trout Creek Ecological Reserve Invasive Plant Inventory Data**

### ***Trout Creek Ecological Reserve: Inventory Results and Recommendations***

One day (2 man-days) of invasive plant inventories were conducted throughout the Trout Creek Ecological Reserve in September of 2006. Primary infestations included Dalmatian toadflax and diffuse knapweed. Sulphur cinquefoil was observed in two different areas, one of which was a small area of sporadic individuals and the other was a single plant.

Recommended management options include:

- Chemical spot-treatment of sulphur cinquefoil to prevent spread
- Ongoing biological treatment and monitoring of Dalmatian toadflax and diffuse knapweed

## Section 6: Kalamalka Lake Provincial Park

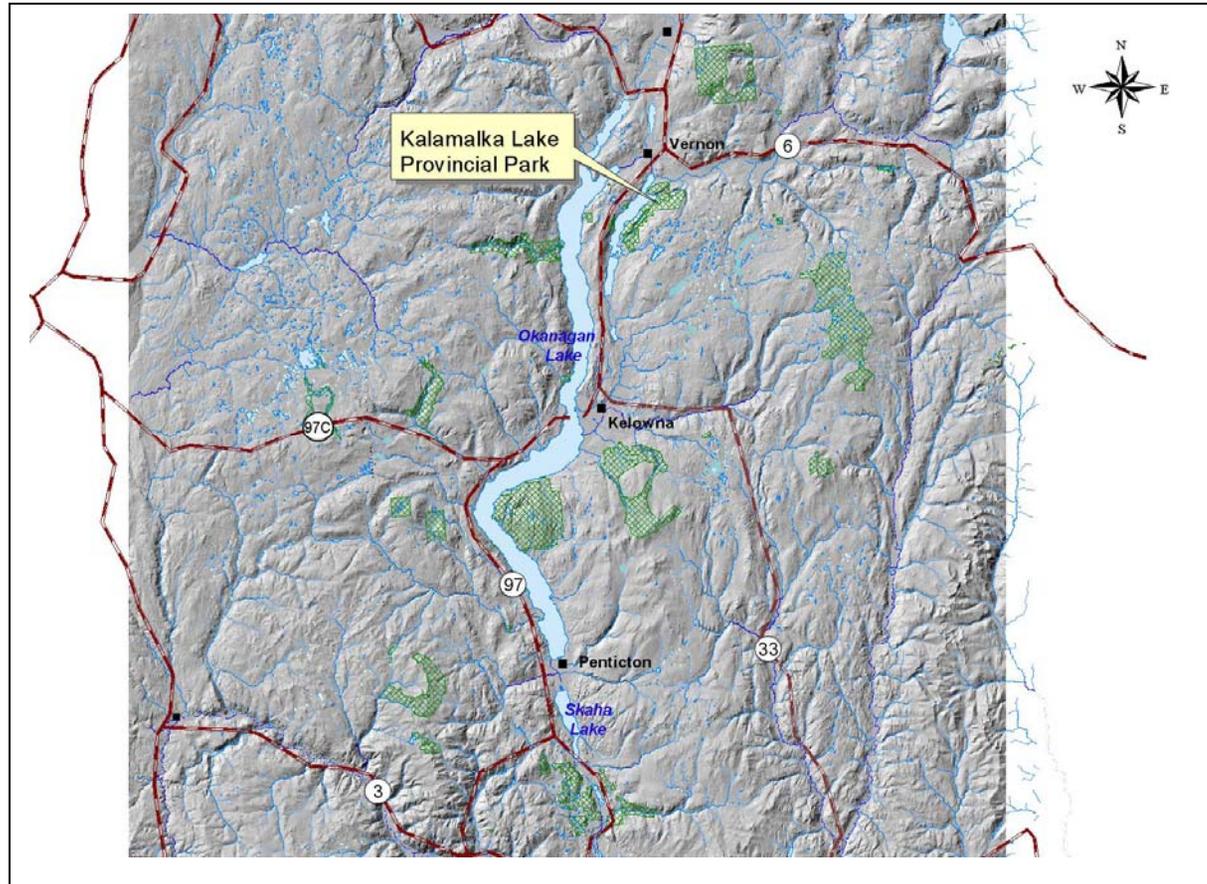
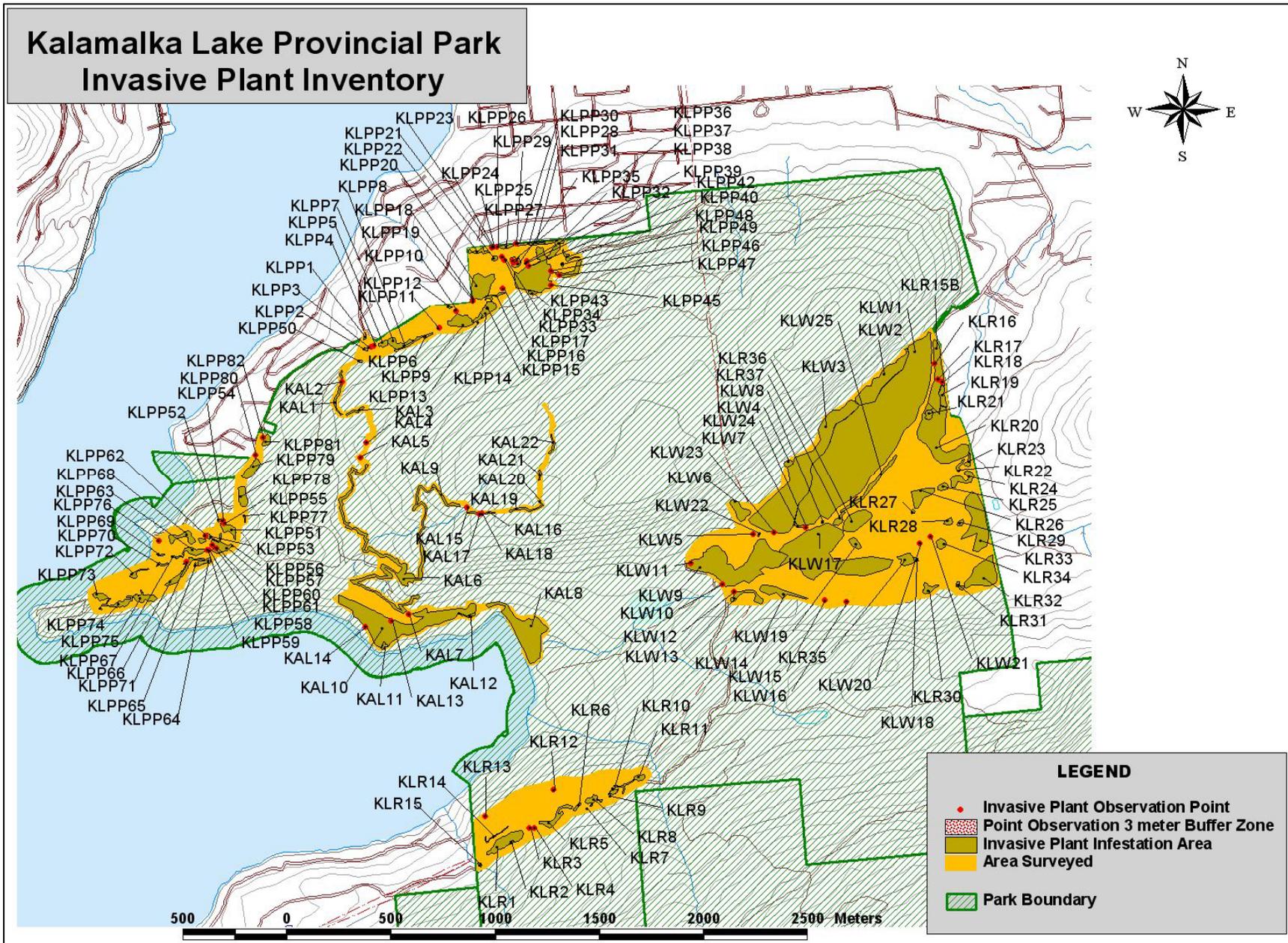


Figure 6-1: Kalamalka Lake Provincial Park Overview



**Figure 6-1: Kalamalka Lake Provincial Park Invasive Plant Inventory**

Paper File ID	Date	Species 1	Dc 1	Species 2	Dc 2	Species 3	Dc 3	UTM_E	UTM_N	Location	BEC classification(s)	Hectares
KAL1	20061007	SJ	5	SC	5	DK	2	337857	5564408	Kalamalka Lk PP	IDF xh 1a	0.196
KAL2	20061007	DT	2					337854	5564408	Kalamalka Lk PP	IDF xh 1a	0.003
KAL3	20061007	SJ	5-6					337906	5564258	Kalamalka Lk PP	IDF xh 1a	0.087
KAL4	20061007	SJ	3					337935	5564104	Kalamalka Lk PP	IDF xh 1a	0.003
KAL5	20061007	SJ	1					337896	5564040	Kalamalka Lk PP	IDF xh 1a	0.003
KAL6	20061007	SJ	5	SC	5	DK	2	338042	5563469	Kalamalka Lk PP	IDF xh 1a	2.684
KAL7	20061007	RS	1					338035	5563253	Kalamalka Lk PP	IDF xh 1a	0.003
KAL8	20061007	CT	5	BT	3	SC	5	338593	5563146	Kalamalka Lk PP	IDF xh 1a	2.596
KAL9	20061007	DT	4	SJ	5	SC	6	338116	5563754	Kalamalka Lk PP	IDF xh 1a	0.485
KAL10	20061007	SC	7-9					338028	5563201	Kalamalka Lk PP	IDF xh 1a	4.78
KAL11	20061007	DK	2	SC	4	SJ	3	337890	5563125	Kalamalka Lk PP	IDF xh 1a	0.05
KAL12	20061007	DK	2	SC	6-7	SJ	3	338310	5563210	Kalamalka Lk PP	IDF xh 1a	0.085
KAL13	20061007	DK	1					337947	5563239	Kalamalka Lk PP	IDF xh 1a	0.003
KAL14	20061007	SJ	1					337819	5563225	Kalamalka Lk PP	IDF xh 1a	0.003
KAL15	20061007	DK	3					338377	5563733	Kalamalka Lk PP	IDF xh 1a	0.003
KAL16	20061007	DK	2-4					338373	5563707	Kalamalka Lk PP	IDF xh 1a	0.078
KAL17	20061007	SJ	3					338430	5563695	Kalamalka Lk PP	IDF xh 1a	0.003
KAL18	20061007	SJ	3					338441	5563694	Kalamalka Lk PP	IDF xh 1a	0.003
KAL19	20061007	SC	6					338635	5563694	Kalamalka Lk PP	IDF xh 1a	0.097
KAL20	20061007	SJ	2					338688	5563682	Kalamalka Lk PP	IDF xh 1a	0.042
KAL21	20061007	SC	5-6					338731	5563818	Kalamalka Lk PP	IDF xh 1a	0.047
KAL22	20061007	SJ	6					338795	5563946	Kalamalka Lk PP	IDF xh 1a	0.077
KLPP1	20061005	CB	3					337992	5564631	Kalamalka Lk PP	IDF xh 1a	0.013
KLPP2	20061005	SC	3					337987	5564552	Kalamalka Lk PP	IDF xh 1a	0.021
KLPP3	20061005	BT	3					338015	5564559	Kalamalka Lk PP	IDF xh 1a	0.003
KLPP4	20061005	SC	3					338026	5564562	Kalamalka Lk PP	IDF xh 1a	0.003
KLPP5	20061005	ST	5	SC	2	CV	2	338082	5564568	Kalamalka Lk PP	IDF xh 1a	0.096
KLPP6	20061005	SC	4	DK	5	SJ	6	338178	5564545	Kalamalka Lk PP	IDF xh 1a	0.176

**Table 6-1: Kalamalka Lake Provincial Park Invasive Plant Inventory Data**

Paper File ID	Date	Species_1	Dc_1	Species_2	Dc_2	Species_3	Dc_3	UTM_E	UTM_N	Location	BEC classification(s)	Hectares
KLPP7	20061005	SC	4	SJ	5	ST	2	338128	5564536	Kalamalka Lk PP	IDF xh 1a	0.297
KLPP8	20061005	BT	5					338170	5564541	Kalamalka Lk PP	IDF xh 1a	0.004
KLPP9	20061005	SC	6-7	SJ	5-6	DK	2-4	338473	5564599	Kalamalka Lk PP	IDF xh 1a	0.527
KLPP10	20061005	HT	2					338440	5564677	Kalamalka Lk PP	IDF xh 1a	0.003
KLPP11	20061005	SC	2					338350	5564611	Kalamalka Lk PP	IDF xh 1a	0.003
KLPP12	20061005	CT	2					338418	5564699	Kalamalka Lk PP	IDF xh 1a	0.015
KLPP13	20061005	DT	3	SC	6	DK	2-4	338540	5564629	Kalamalka Lk PP	IDF xh 1a	0.075
KLPP14	20061005	SC	6	DK	4	SJ	2-5	338598	5564701	Kalamalka Lk PP	IDF xh 1a	0.308
KLPP15	20061005	CT	3-5					338590	5564666	Kalamalka Lk PP	IDF xh 1a	0.012
KLPP16	20061005	CT	5					338608	5564722	Kalamalka Lk PP	IDF xh 1a	0.099
KLPP17	20061005	ST	3					338678	5564756	Kalamalka Lk PP	IDF xh 1a	0.003
KLPP18	20061005	ST	3					338526	5564718	Kalamalka Lk PP	IDF xh 1a	0.003
KLPP19	20061005	CT	2					338527	5564715	Kalamalka Lk PP	IDF xh 1a	0.003
KLPP20	20061005	SC	6-7	DK	2-4			338565	5564751	Kalamalka Lk PP	IDF xh 1a	1.005
KLPP21	20061005	DT	3					338651	5564896	Kalamalka Lk PP	IDF xh 1a	0.048
KLPP22	20061005	DK	5	SJ	5	SC	2-4	338571	5564943	Kalamalka Lk PP	IDF xh 1a	0.125
KLPP23	20061005	SJ	3					338650	5564959	Kalamalka Lk PP	IDF xh 1a	0.003
KLPP24	20061005	ST	1					338654	5564962	Kalamalka Lk PP	IDF xh 1a	0.003
KLPP25	20061005	SC	2					338657	5564959	Kalamalka Lk PP	IDF xh 1a	0.003
KLPP26	20061005	SJ	2					338675	5564959	Kalamalka Lk PP	IDF xh 1a	0.003
KLPP27	20061005	SC	6	DK	2			338711	5564964	Kalamalka Lk PP	IDF xh 1a	0.095
KLPP28	20061005	SJ	5	SC	5			338756	5564956	Kalamalka Lk PP	IDF xh 1a	0.198
KLPP29	20061005	BT	3					338765	5564963	Kalamalka Lk PP	IDF xh 1a	0.003
KLPP30	20061005	DT	3					338773	5564962	Kalamalka Lk PP	IDF xh 1a	0.002
KLPP31	20061005	CT	3	SC	5	SJ	5	338840	5564960	Kalamalka Lk PP	IDF xh 1a	0.04
KLPP32	20061005	SC	5	SJ	5	DK	2	338964	5564953	Kalamalka Lk PP	IDF xh 1a	0.275
KLPP33	20061005	CT	1					338694	5564908	Kalamalka Lk PP	IDF xh 1a	0.003
KLPP34	20061005	SJ	3					338703	5564893	Kalamalka Lk PP	IDF xh 1a	0.003
KLPP35	20061005	SC	4					338727	5564896	Kalamalka Lk PP	IDF xh 1a	0.186
KLPP36	20061005	ST	1					338741	5564883	Kalamalka Lk PP	IDF xh 1a	0.003
KLPP37	20061005	ST	1					338741	5564872	Kalamalka Lk PP	IDF xh 1a	0.003
KLPP38	20061005	ST	1					338755	5564877	Kalamalka Lk PP	IDF xh 1a	0.003

**Table 6-1: Kalamalka Lake Provincial Park Invasive Plant Inventory Data**

Paper File ID	Date	Species_1	Dc_1	Species_2	Dc_2	Species_3	Dc_3	UTM_E	UTM_N	Location	BEC classification(s)	Hectares
KLPP39	20061005	SJ	2					338809	5564873	Kalamalka Lk PP	IDF xh 1a	0.003
KLPP40	20061005	CT	3					338814	5564848	Kalamalka Lk PP	IDF xh 1a	0.003
KLPP41	20061005	ST	6	SC	2	MU	7	338808	5564849	Kalamalka Lk PP	IDF xh 1a	2.167
KLPP42	20061005	SC	6	SJ	5	DK	5	338797	5564863	Kalamalka Lk PP	IDF xh 1a	0.009
KLPP43	20061005	SJ	5					338799	5564725	Kalamalka Lk PP	IDF xh 1a	0.056
KLPP44	20061005	SJ	5	SC	4			338937	5564799	Kalamalka Lk PP	IDF xh 1a	0.292
KLPP45	20061005	DT	3					338908	5564744	Kalamalka Lk PP	IDF xh 1a	0.003
KLPP46	20061005	DT	3					338915	5564812	Kalamalka Lk PP	IDF xh 1a	0.003
KLPP47	20061005	ST	1					338955	5564787	Kalamalka Lk PP	IDF xh 1a	0.003
KLPP48	20061005	BT	5					338985	5564901	Kalamalka Lk PP	IDF xh 1a	0.114
KLPP49	20061005	DT	3					338978	5564836	Kalamalka Lk PP	IDF xh 1a	0.022
KLPP50	20061005	SC	2	SJ	2	DK	2	337593	5564496	Kalamalka Lk PP	IDF xh 1a	0.021
KLPP51	20061005	SC	7					337241	5563729	Kalamalka Lk PP	IDF xh 1a	0.259
KLPP52	20061005	DK	7					337182	5563819	Kalamalka Lk PP	IDF xh 1a	0.014
KLPP53	20061005	DT	5-6					337181	5563753	Kalamalka Lk PP	IDF xh 1a	0.173
KLPP54	20061005	SC	3					337202	5563816	Kalamalka Lk PP	IDF xh 1a	0.003
KLPP55	20061005	CT	3					337208	5563803	Kalamalka Lk PP	IDF xh 1a	0.003
KLPP56	20061005	SJ	3					337234	5563689	Kalamalka Lk PP	IDF xh 1a	0.008
KLPP57	20061005	SC	5-7	DK	4	SJ	5	337172	5563716	Kalamalka Lk PP	IDF xh 1a	0.357
KLPP58	20061005	OD	3					337119	5563683	Kalamalka Lk PP	IDF xh 1a	0.003
KLPP59	20061005	DT	3					337110	5563687	Kalamalka Lk PP	IDF xh 1a	0.003
KLPP60	20061005	DT	3					337157	5563687	Kalamalka Lk PP	IDF xh 1a	0.003
KLPP61	20061005	DT	3					337138	5563706	Kalamalka Lk PP	IDF xh 1a	0.003
KLPP62	20061005	SC	3					337109	5563753	Kalamalka Lk PP	IDF xh 1a	0.003
KLPP63	20061005	SC	2	DK	4	SJ	5	337094	5563680	Kalamalka Lk PP	IDF xh 1a	0.268
KLPP64	20061005	DT	3	DK	4			337109	5563646	Kalamalka Lk PP	IDF xh 1a	0.116
KLPP65	20061005	CT	3					337046	5563632	Kalamalka Lk PP	IDF xh 1a	0.013
KLPP66	20061005	DK	4-6	SC	4-5	SJ	4-5	337023	5563640	Kalamalka Lk PP	IDF xh 1a	0.374
KLPP67	20061005	DK	5	SJ	5			336971	5563673	Kalamalka Lk PP	IDF xh 1a	0.038
KLPP68	20061005	SC	4-7	SJ	5			337054	5563738	Kalamalka Lk PP	IDF xh 1a	0.341
KLPP69	20061005	SJ	5					336901	5563689	Kalamalka Lk PP	IDF xh 1a	0.028
KLPP70	20061005	DK	2-4	SJ	2			336907	5563645	Kalamalka Lk PP	IDF xh 1a	0.051

**Table 6-1: Kalamalka Lake Provincial Park Invasive Plant Inventory Data**

Paper File ID	Date	Species_1	Dc_1	Species_2	Dc_2	Species_3	Dc_3	UTM_E	UTM_N	Location	BEC classification(s)	Hectares
KLPP71	20061005	DT	3					337005	5563642	Kalamalka Lk PP	IDF xh 1a	0.003
KLPP72	20061005	SC	3					336750	5563622	Kalamalka Lk PP	IDF xh 1a	0.095
KLPP73	20061005	SC	5	DK	5	SJ	5	336544	5563550	Kalamalka Lk PP	IDF xh 1a	0.183
KLPP74	20061005	DT	5	DK	4-5	SC	2	336601	5563502	Kalamalka Lk PP	IDF xh 1a	0.283
KLPP75	20061005	SC	5	DK	2-4	SJ	5	336739	5563494	Kalamalka Lk PP	IDF xh 1a	0.33
KLPP76	20061005	DT	3					336885	5563758	Kalamalka Lk PP	IDF xh 1a	0.003
KLPP77	20061005	CT	3					337305	5563800	Kalamalka Lk PP	IDF xh 1a	0.019
KLPP78	20061005	SC	6	DT	5			337301	5563879	Kalamalka Lk PP	IDF xh 1a	0.337
KLPP79	20061005	SC	4-6	DK	4-7			337318	5564020	Kalamalka Lk PP	IDF xh 1a	0.387
KLPP80	20061005	HA	4					337399	5564114	Kalamalka Lk PP	IDF xh 1a	0.003
KLPP81	20061005	SC	6					337433	5564160	Kalamalka Lk PP	IDF xh 1a	0.156
KLPP82	20061005	SJ	3					337444	5564193	Kalamalka Lk PP	IDF xh 1a	0.003
KLR1	20060912	SC	7	DK	6	SK	3	338260	5562079	Kalamalka Lk PP	IDF xh 1	0.741
KLR2	20060912	SJ	3	SC	4			338383	5562113	Kalamalka Lk PP	IDF xh 1	0.023
KLR3	20060912	SC	3					338479	5562173	Kalamalka Lk PP	IDF xh 1	0.003
KLR4	20060912	SJ	3					338505	5562169	Kalamalka Lk PP	IDF xh 1	0.003
KLR5	20060912	SC	7-8	SJ	3	DK	7	338531	5562195	Kalamalka Lk PP	IDF xh 1	0.385
KLR6	20060912	SJ	6	SC	2			338703	5562238	Kalamalka Lk PP	IDF xh 1	0.054
KLR7	20060912	SC	3	DK	2			338763	5562229	Kalamalka Lk PP	IDF xh 1	0.004
KLR8	20060912	SJ	5	SC	7	DK	4	338780	5562238	Kalamalka Lk PP	IDF xh 1	0.179
KLR9	20060912	SC	3	SJ	5			338877	5562277	Kalamalka Lk PP	IDF xh 1	0.011
KLR10	20060912	SC	7					338920	5562299	Kalamalka Lk PP	IDF xh 1	0.078
KLR11	20060912	DK	8	SC	7	SJ	5	338954	5562318	Kalamalka Lk PP	IDF xh 1	0.208
KLR12	20060912	BT	1					338613	5562337	Kalamalka Lk PP	IDF xh 1	0.003
KLR13	20060912	SC	1	DK	2			338274	5562253	Kalamalka Lk PP	IDF xh 1	0.003
KLR14	20060912	SC	3	DK	2			338265	5562159	Kalamalka Lk PP	IDF xh 1	0.065
KLR15	20060912	BT	2	MU	3			338219	5562030	Kalamalka Lk PP	IDF xh 1	0.017
KLR15B	20060913	SC	4	DK	4			340704	5564242	Kalamalka Lk PP	IDF xh 1a	1.345
KLR16	20060913	HA	1					340689	5564141	Kalamalka Lk PP	IDF xh 1a	0.003
KLR17	20060913	DT	2					340695	5564064	Kalamalka Lk PP	IDF xh 1a	0.003
KLR18	20060913	HA	2					340715	5564048	Kalamalka Lk PP	IDF xh 1a	0.003
KLR19	20060913	SC	3	DK	2	SJ	1	340717	5563931	Kalamalka Lk PP	IDF xh 1a	0.246

**Table 6-1: Kalamalka Lake Provincial Park Invasive Plant Inventory Data**

Paper File ID	Date	Species_1	Dc_1	Species_2	Dc_2	Species_3	Dc_3	UTM_E	UTM_N	Location	BEC classification(s)	Hectares
KLR20	20060913	SC	9	DK	2			340710	5563927	Kalamalka Lk PP	IDF xh 1a	3.033
KLR21	20060913	SC	9	SJ	3			340602	5563887	Kalamalka Lk PP	IDF xh 1a	0.142
KLR22	20060913	SJ	5	SC	7	DK	2	340764	5563663	Kalamalka Lk PP	IDF xh 1a	0.081
KLR23	20060913	BT	2	MU	2			340788	5563640	Kalamalka Lk PP	IDF xh 1a	0.099
KLR24	20060913	SC	6	SJ	3			340797	5563593	Kalamalka Lk PP	IDF xh 1 / IDF xh 1a	0.413
KLR25	20060913	SJ	6	SC	4			340674	5563545	Kalamalka Lk PP	IDF xh 1a	0.147
KLR26	20060913	SC	6					340603	5563536	Kalamalka Lk PP	IDF xh 1a	0.562
KLR27	20060913	SJ	3	SC	4	MU	2	340497	5563442	Kalamalka Lk PP	IDF xh 1 / IDF xh 1a	0.033
KLR28	20060913	SJ	2	SC	2			340657	5563364	Kalamalka Lk PP	IDF xh 1	0.093
KLR29	20060913	SC	3					340720	5563373	Kalamalka Lk PP	IDF xh 1	0.065
KLR30	20060913	DK	7	SC	7			340500	5563051	Kalamalka Lk PP	IDF xh 1	0.203
KLR31	20060913	SC	7	DK	4	BT	5	340663	5563073	Kalamalka Lk PP	IDF xh 1	0.077
KLR32	20060913	SC	7	DK	7			340703	5563053	Kalamalka Lk PP	IDF xh 1	1.414
KLR33	20060913	SC	7	DK	4			340775	5563222	Kalamalka Lk PP	IDF xh 1	2.05
KLR34	20060913	SC	7					340627	5563273	Kalamalka Lk PP	IDF xh 1	0.171
KLR35	20060913	SC	7					340456	5563248	Kalamalka Lk PP	IDF xh 1	0.319
KLR36	20060913	CT	8					340187	5563385	Kalamalka Lk PP	IDF xh 1a	0.906
KLR37	20060913	SJ	7					340124	5563427	Kalamalka Lk PP	IDF xh 1a	0.162
KLW1	20060913	SC	7	DK	6-7	MU	3	340678	5564285	Kalamalka Lk PP	IDF xh 1a	21.601
KLW2	20060913	SJ	6	SC	7	DK	6	340558	5564220	Kalamalka Lk PP	IDF xh 1a	1.788
KLW3	20060913	MU	4	BT	2	SC	7	340284	5564002	Kalamalka Lk PP	IDF xh 1a	7.322
KLW4	20060913	SJ	6	DT	3			339946	5563754	Kalamalka Lk PP	IDF xh 1a	0.105
KLW5	20060913	SJ	3					339719	5563433	Kalamalka Lk PP	IDF xh 1a	0.003
KLW6	20060913	SJ	3	SC	2			339648	5563569	Kalamalka Lk PP	IDF xh 1a	0.473
KLW7	20060913	CT	3	MU	4	HT	3	339922	5563450	Kalamalka Lk PP	IDF xh 1a	0.055
KLW8	20060913	HA	2	CY	2	SC	6	340051	5563450	Kalamalka Lk PP	IDF xh 1a	0.012
KLW9	20060913	SC	8	DK	5	SJ	6	339553	5563204	Kalamalka Lk PP	IDF xh 1a	4.817
KLW10	20060913	HA	2					339543	5563215	Kalamalka Lk PP	IDF xh 1a	0.003
KLW11	20060913	BT	2					339408	5563334	Kalamalka Lk PP	IDF xh 1a	0.003
KLW12	20060913	HA	1					339595	5563172	Kalamalka Lk PP	IDF xh 1a	0.003
KLW13	20060913	SJ	6					339584	5563146	Kalamalka Lk PP	IDF xh 1a	0.318
KLW14	20060913	SC	7	DK	4	SJ	2	339754	5563146	Kalamalka Lk PP	IDF xh 1a / IDF xh 1	0.552

**Table 6-1: Kalamalka Lake Provincial Park Invasive Plant Inventory Data**

Paper File ID	Date	Species_1	Dc_1	Species_2	Dc_2	Species_3	Dc_3	UTM_E	UTM_N	Location	BEC classification(s)	Hectares
KLW15	20060913	CT	3					340023	5563073	Kalamalka Lk PP	IDF xh 1	0.003
KLW16	20060913	SJ	1					340127	5563054	Kalamalka Lk PP	IDF xh 1	0.003
KLW17	20060913	SC	7-8	SJ	5	DK	4	339880	5563280	Kalamalka Lk PP	IDF xh 1a / IDF xh 1	6.763
KLW18	20060913	DT	3	SC	7			340481	5563205	Kalamalka Lk PP	IDF xh 1	0.032
KLW19	20060913	SJ	5					340218	5563305	Kalamalka Lk PP	IDF xh 1a	0.187
KLW20	20060913	SC	3					340510	5563288	Kalamalka Lk PP	IDF xh 1	0.003
KLW21	20060913	SJ	1					341044	5563315	Kalamalka Lk PP	IDF xh 1	0.003
KLW22	20060913	HA	3					339750	5563432	Kalamalka Lk PP	IDF xh 1a	0.014
KLW23	20060913	HA	1					339821	5563427	Kalamalka Lk PP	IDF xh 1a	0.003
KLW24	20060913	CY	1					339975	5563434	Kalamalka Lk PP	IDF xh 1a	0.003
KLW25	20060913	HA	2					340151	5563488	Kalamalka Lk PP	IDF xh 1a	0.467

**Table 6-1: Kalamalka Lake Provincial Park Invasive Plant Inventory Data**

### ***Kalamalka Lake Provincial Park: Inventory Results and Recommendations***

Four days (7 man-days) of invasive plant inventories were conducted throughout priority sections of Kalamalka Lake Provincial Park in September and October of 2006. Results identified large infestations of sulphur cinquefoil, diffuse knapweed, St. John's wort and Dalmatian toadflax. Other observations of concern included hoary alyssum, scotch thistle, Canada thistle, bull thistle, cleavers, chicory and oxeye daisy. One rush skeletonweed was observed and pulled-out but was recorded and mapped for monitoring.

Recommended management options include:

- Chemical treatment of sulphur cinquefoil along trails, roads, and park entrances to reduce spread
- Ongoing biological treatment and monitoring for St. John's wort, diffuse knapweed, Dalmatian toadflax and Canada thistle
- Manual removal of scotch thistle, hoary alyssum, oxeye daisy, cleavers and chicory

## Section 7: Campbell–Brown Ecological Reserve

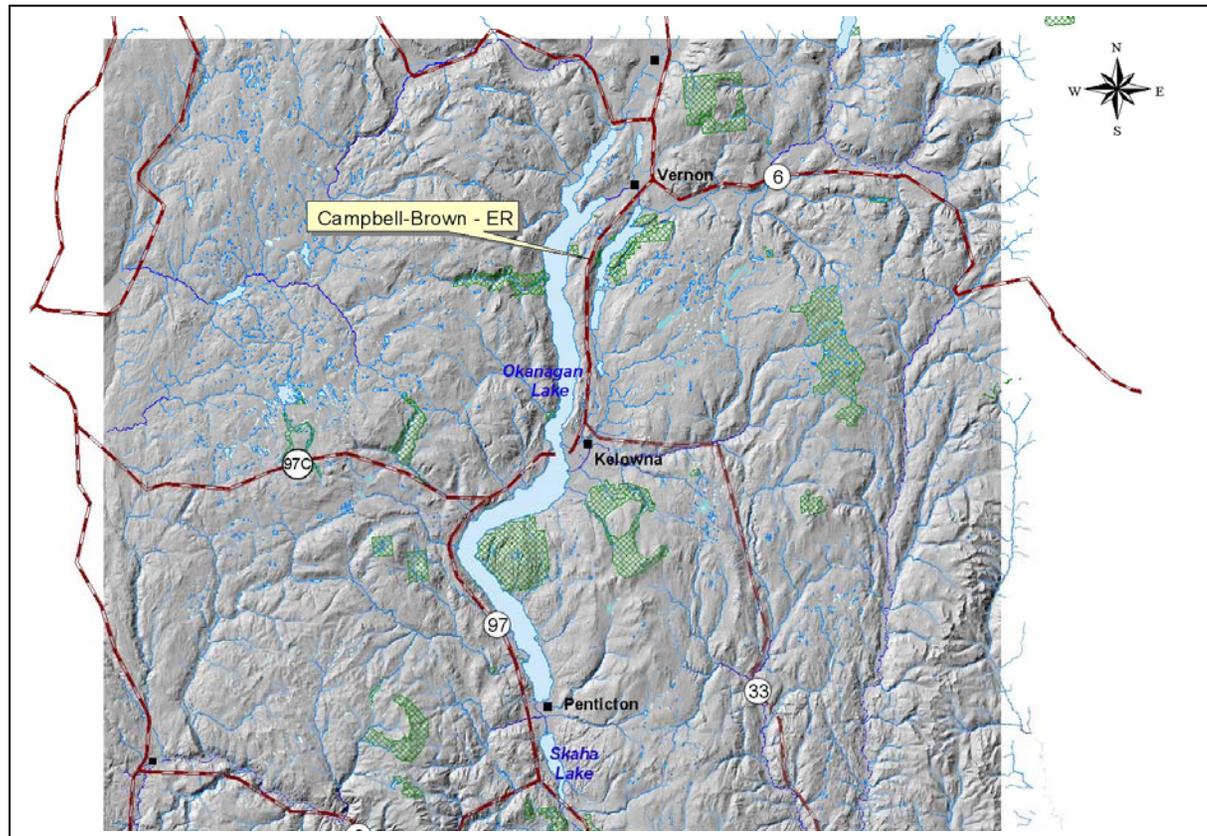


Figure 7-1: Campbell-Brown Ecological Reserve Overview

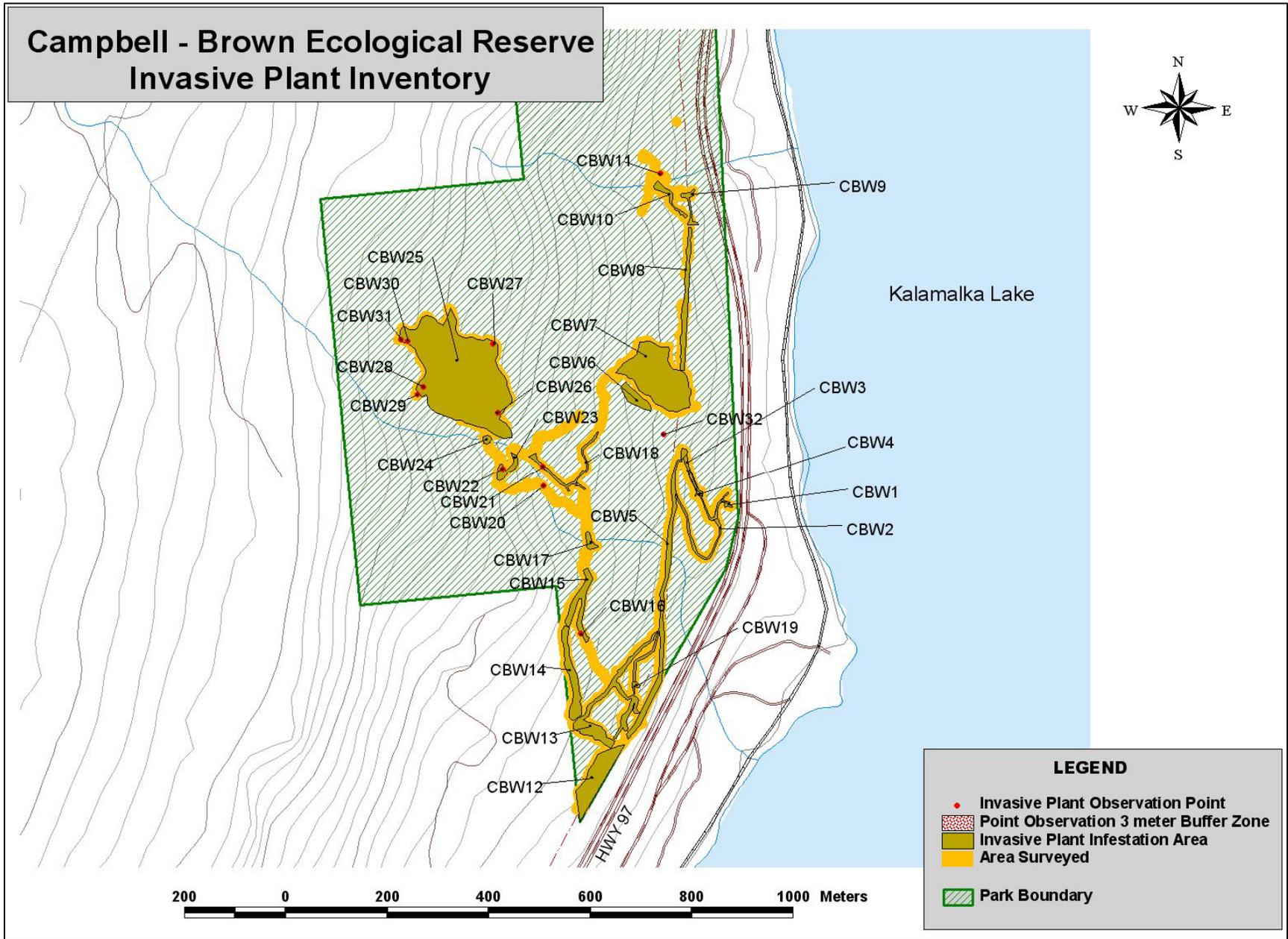


Figure 7-2: Campbell-Brown Ecological Reserve Invasive Plant Inventory

Paper File ID	Date	Species_1	Dc_1	Species_2	Dc_2	Species_3	Dc_3	UTM_E	UTM_N	Location	BEC classification(s)	Hectares
CBW1	20060904	DK	7	HT	5	DT	5	330614	5558290	Campbell-Brown ER	IDF xh 1	0.012
CBW2	20060904	DK	4					330578	5558270	Campbell-Brown ER	IDF xh 1	0.122
CBW3	20060904	SC	2-4					330570	5558285	Campbell-Brown ER	IDF xh 1	0.098
CBW4	20060904	SJ	5					330564	5558318	Campbell-Brown ER	IDF xh 1	0.023
CBW5	20060904	SC	5	DK	5			330544	5558406	Campbell-Brown ER	IDF xh 1	0.545
CBW6	20060904	HT	2	SC	2			330478	5558513	Campbell-Brown ER	IDF xh 1	0.133
CBW7	20060904	SC	8-9	DK	5	HT	2	330443	5558578	Campbell-Brown ER	IDF xh 1	1.115
CBW8	20060904	SC	5	DK	5	HT	2	330579	5558684	Campbell-Brown ER	IDF xh 1	0.238
CBW9	20060904	DT	5	DK	5			330610	5558855	Campbell-Brown ER	IDF xh 1	0.055
CBW10	20060904	HT	4					330580	5558916	Campbell-Brown ER	IDF xh 1	0.07
CBW11	20060904	BT	3					330563	5558957	Campbell-Brown ER	IDF xh 1	0.003
CBW12	20061012	SC	5	DT	5	DK	4	330280	5557774	Campbell-Brown ER	IDF xh 1	0.462
CBW13	20061012	DK	5					330354	5557889	Campbell-Brown ER	IDF xh 1	0.482
CBW14	20061012	DT	5	DK	2-4			330270	5557965	Campbell-Brown ER	IDF xh 1	0.264
CBW15	20061012	DK	2					330290	5558140	Campbell-Brown ER	IDF xh 1	0.22
CBW16	20061012	SC	3					330296	5558078	Campbell-Brown ER	IDF xh 1	0.003
CBW17	20061012	SC	3					330337	5558252	Campbell-Brown ER	IDF xh 1	0.043
CBW18	20061012	DK	2					330321	5558376	Campbell-Brown ER	IDF xh 1	0.113
CBW19	20061012	DT	5					330385	5557968	Campbell-Brown ER	IDF xh 1	0.013
CBW20	20061012	SC	3	DK	3			330258	5558375	Campbell-Brown ER	IDF xh 1	0.003
CBW21	20061012	SC	3					330263	5558415	Campbell-Brown ER	IDF xh 1	0.003
CBW22	20061012	SJ	3					330183	5558420	Campbell-Brown ER	IDF xh 1	0.003
CBW23	20061012	DK	2					330189	5558415	Campbell-Brown ER	IDF xh 1	0.084
CBW24	20061012	SC	3	HT	3			330121	5558547	Campbell-Brown ER	IDF xh 1	0.022
CBW25	20061012	DT	6	DK	6			330161	5558480	Campbell-Brown ER	IDF xh 1	3.075
CBW26	20061012	SC	3					330187	5558531	Campbell-Brown ER	IDF xh 1	0.003
CBW27	20061012	SC	3					330196	5558667	Campbell-Brown ER	IDF xh 1	0.003
CBW28	20061012	HT	1					330048	5558599	Campbell-Brown ER	IDF xh 1	0.003
CBW29	20061012	HT	3					330035	5558587	Campbell-Brown ER	IDF xh 1	0.003
CBW30	20061012	HT	3					330028	5558692	Campbell-Brown ER	IDF xh 1	0.003
CBW31	20061012	HT	3					330016	5558697	Campbell-Brown ER	IDF xh 1	0.003
CBW32	20061012	DT	3					330507	5558449	Campbell-Brown ER	IDF xh 1	0.003

**Table 7-1: Campbell-Brown Ecological Reserve Invasive Plant Inventory Data**

## ***Campbell-Brown Ecological Reserve: Inventory Results and Recommendations***

Two days (3 man-days) of invasive plant inventories were conducted through the Campbell-Brown Ecological Reserve in September and October of 2006. Inventories through this property focused primarily along old roadways, trails and the utilities corridor. Results identified infestations of sulphur cinquefoil, diffuse knapweed and Dalmatian toadflax. Other observations included sporadic distributions of hound's tongue and St. John's wort.

Recommended management options include:

- Chemical treatment of sulphur cinquefoil to prevent further spread
- Ongoing biological treatment and monitoring of Dalmatian toadflax, diffuse knapweed, and hound's-tongue
- Manual removal of hound's-tongue seed and St. John's wort

## Section 8: Schneider Property

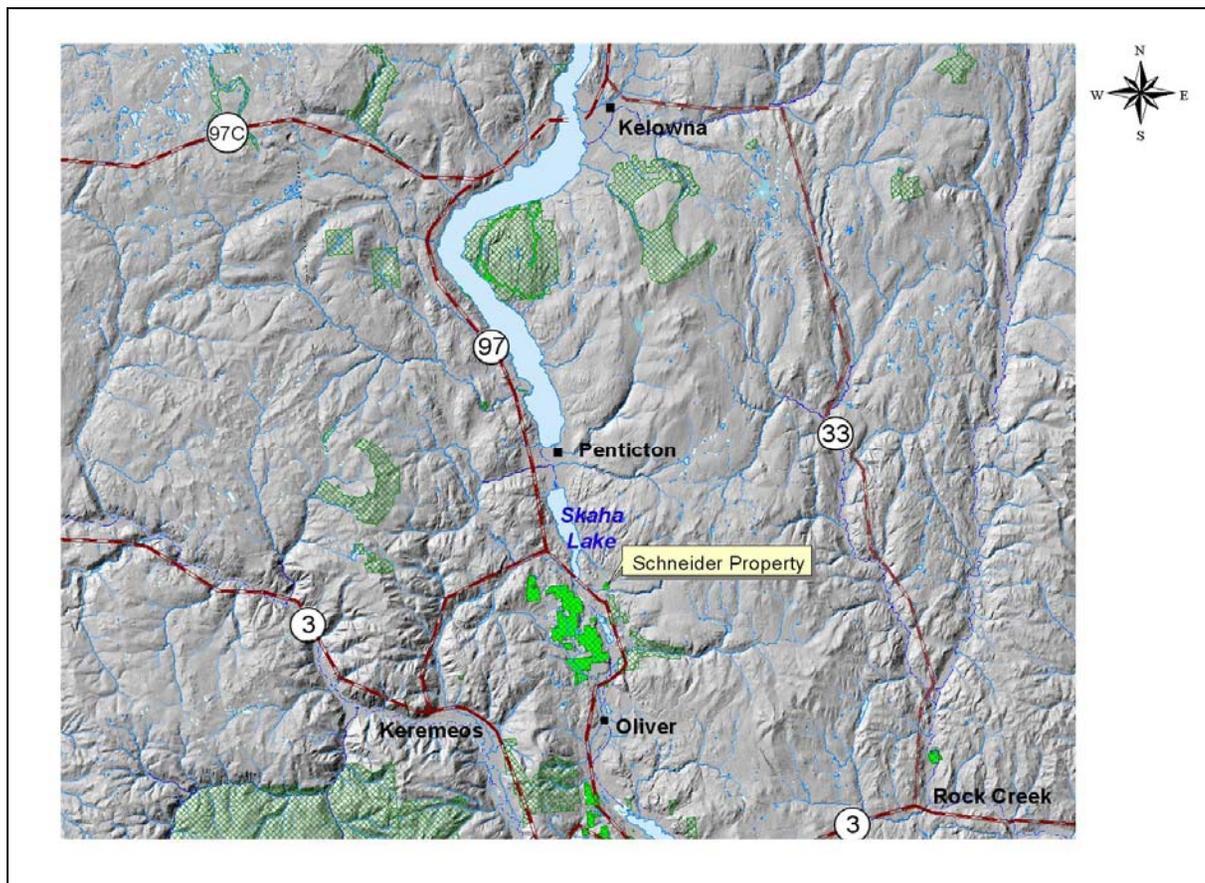


Figure 8-1: Schneider Property Overview

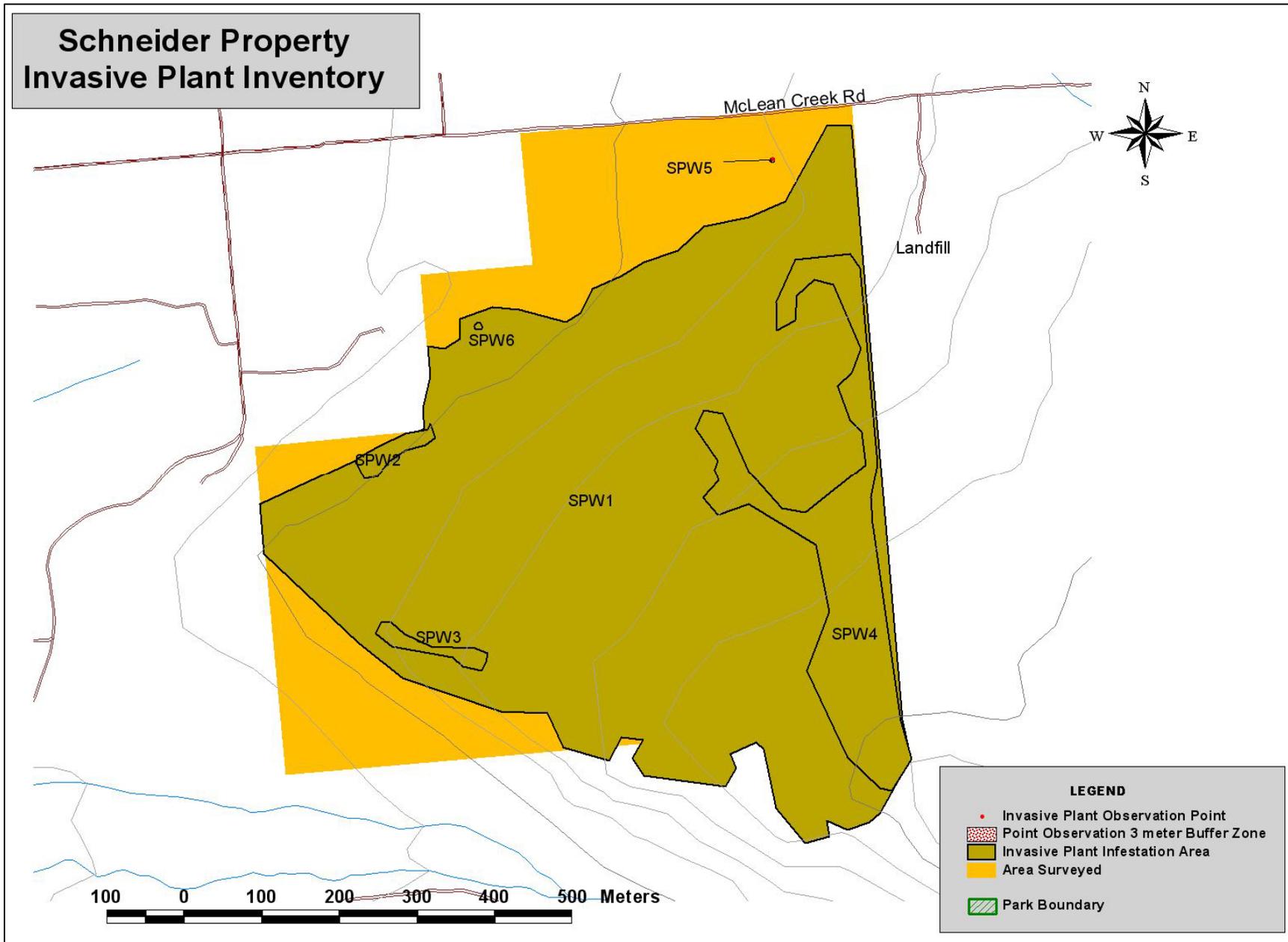


Figure 8-2: Schneider Property Invasive Plant Inventory

Paper File ID	Date	Species_1	Dc_1	Species_2	Dc_2	Species_3	Dc_3	UTM_E	UTM_N	Location	BEC classification(s)	Hectares
SPW1	20060902	SC	6	DK	4			317006	5468312	Schnieder Property	BG xh 1	42.969
SPW2	20060902	SJ	3	SC	6	DK	4	316478	5468122	Schnieder Property	BG xh 1	0.249
SPW3	20060902	SJ	5	SC	5	DK	4	316401	5467870	Schnieder Property	BG xh 1	0.261
SPW4	20060902	SJ	5-6	SC	5	DK	4	317033	5467634	Schnieder Property	BG xh 1	4.959
SPW5	20060902	HT	1					316969	5468414	Schnieder Property	BG xh 1	0.003
SPW6	20060902	DT	3					316563	5468252	Schnieder Property	BG xh 1	0.006

**Table 8-1: Schneider Property Invasive Plant Inventory Data**

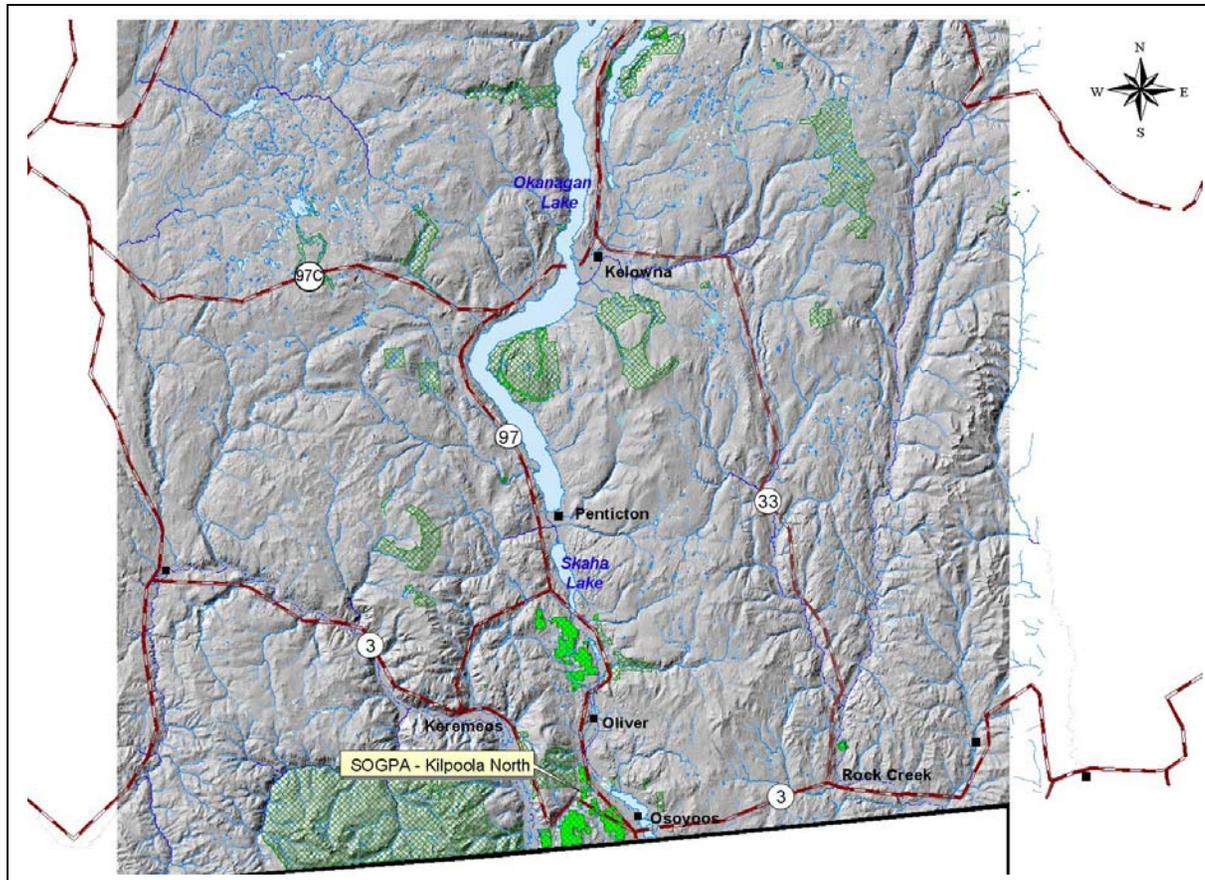
### ***Schneider Property: Inventory Results and Recommendations***

One day (two man-days) of invasive plant inventories were conducted throughout the Schneider Property in September of 2006. Inventory efforts focused on providing baseline data throughout this property with a priority on sulphur cinquefoil infestations. Results identified large infestations of sulphur cinquefoil throughout the majority of the area with consistent diffuse knapweed distributions and patches of St. John's wort. Other observations included one hound's-tongue plant and a patch of Dalmatian toadflax.

Recommended management options include:

- Chemical treatment of sulphur cinquefoil along trails and perimeter of infestation area
- Ongoing biological treatment and monitoring of diffuse knapweed and St. John's wort
- Manual removal of hounds-tongue

**Section 9A: South Okanagan Grasslands Protected Area**  
*North Kilpoola*



**Figure 9A-1: SOGPA – North Kilpoola Overview**

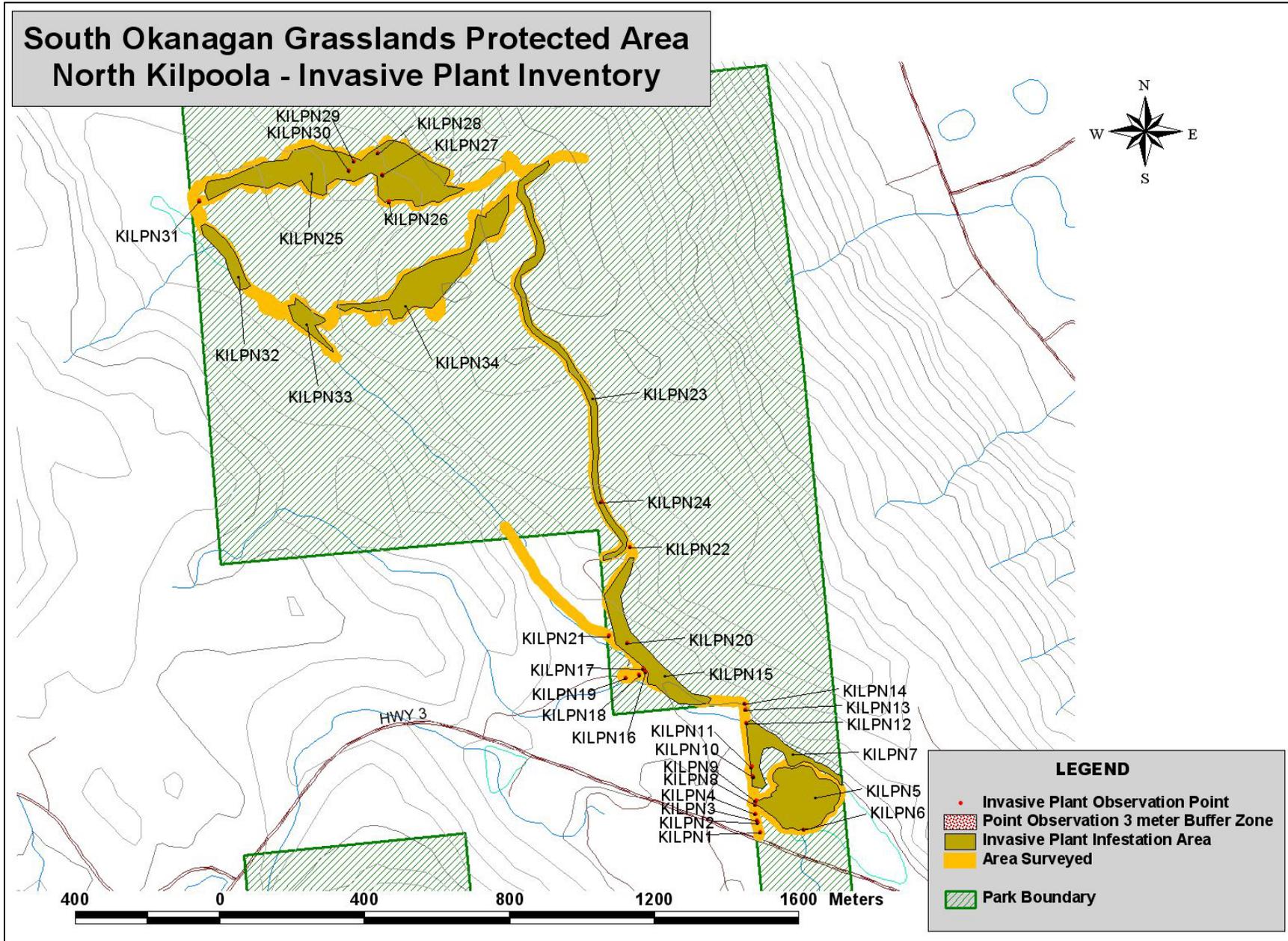


Figure 9A-2: SOGPA – North Kilpoola Invasive Plant Inventory

Paper File ID	Date	Species_1	Dc_1	Species_2	Dc_2	Species_3	Dc_3	UTM_E	UTM_N	Location	BEC classification(s)	Hectares
KILPN1	20061010	KO	1					312060	5440018	N. Kilpoola PA	BG xh 1	0.003
KILPN2	20061010	RT	3					312057	5440045	N. Kilpoola PA	BG xh 1	0.003
KILPN3	20061010	DK	1					312057	5440052	N. Kilpoola PA	BG xh 1	0.003
KILPN4	20061010	DK	1					312055	5440070	N. Kilpoola PA	BG xh 1	0.003
KILPN5	20061010	CT	3					312177	5440099	N. Kilpoola PA	BG xh 1	2.696
KILPN6	20061010	BT	1					312180	5440010	N. Kilpoola PA	BG xh 1	0.003
KILPN7	20061010	DK	5	WM	5			312162	5440197	N. Kilpoola PA	BG xh 1	1.28
KILPN8	20061010	SS	3	WM	3			312057	5440095	N. Kilpoola PA	BG xh 1	0.003
KILPN9	20061010	DK	3	BT	3	WM	3	312059	5440105	N. Kilpoola PA	BG xh 1	0.003
KILPN10	20061010	RT	4	HT	2			312061	5440173	N. Kilpoola PA	BG xh 1	0.003
KILPN11	20061010	RT	2	HT	2			312061	5440200	N. Kilpoola PA	BG xh 1	0.003
KILPN12	20061010	HT	3					312061	5440321	N. Kilpoola PA	BG xh 1	0.003
KILPN13	20061010	BT	1					312063	5440358	N. Kilpoola PA	BG xh 1	0.003
KILPN14	20061010	DK	2					312063	5440375	N. Kilpoola PA	BG xh 1	0.003
KILPN15	20061010	DK	5	WM	5			311855	5440444	N. Kilpoola PA	BG xh 1	2.185
KILPN16	20061010	KO	3					311801	5440495	N. Kilpoola PA	BG xh 1	0.003
KILPN17	20061010	RP	3					311797	5440505	N. Kilpoola PA	BG xh 1	0.003
KILPN18	20061010	RT	2					311783	5440490	N. Kilpoola PA	BG xh 1	0.003
KILPN19	20061010	PV	3					311746	5440487	N. Kilpoola PA	BG xh 1	0.003
KILPN20	20061010	RP	3	KO	3			311762	5440583	N. Kilpoola PA	BG xh 1	0.003
KILPN21	20061010	RP	3	KO	3	RT	3	311714	5440608	N. Kilpoola PA	BG xh 1	0.003
KILPN22	20061010	NT	3					311801	5440844	N. Kilpoola PA	BG xh 1	0.003
KILPN23	20061010	DK	4	NT	2			311668	5441425	N. Kilpoola PA	BG xh 1	2.269
KILPN24	20061010	DT	3					311739	5440976	N. Kilpoola PA	BG xh 1	0.003
KILPN25	20061011	BT	4	WM	5			311334	5441930	N. Kilpoola PA	BG xh 1	5.993
KILPN26	20061011	DK	2					311261	5441874	N. Kilpoola PA	BG xh 1	0.003
KILPN27	20061011	HT	1					311252	5441950	N. Kilpoola PA	BG xh 1	0.003
KILPN28	20061011	SC	3					311246	5442012	N. Kilpoola PA	BG xh 1	0.003
KILPN29	20061011	SC	3					311178	5441998	N. Kilpoola PA	BG xh 1	0.003
KILPN30	20061011	SC	3					311161	5441873	N. Kilpoola PA	BG xh 1	0.003
KILPN31	20061011	CT	3					310742	5441942	N. Kilpoola PA	BG xh 1	0.003
KILPN32	20061011	RP	5					310777	5441836	N. Kilpoola PA	BG xh 1	0.704
KILPN33	20061011	DK	4	BT	5	WM	5	310989	5441593	N. Kilpoola PA	BG xh 1	0.564
KILPN34	20061011	DK	2	BT	2	WM	5	311367	5441657	N. Kilpoola PA	BG xh 1	3.084

**Table 9A-1: SOGPA – North Kilpoola Invasive Plant Inventory Data**

## ***SOGPA – North Kilpoola: Inventory Results and Recommendations***

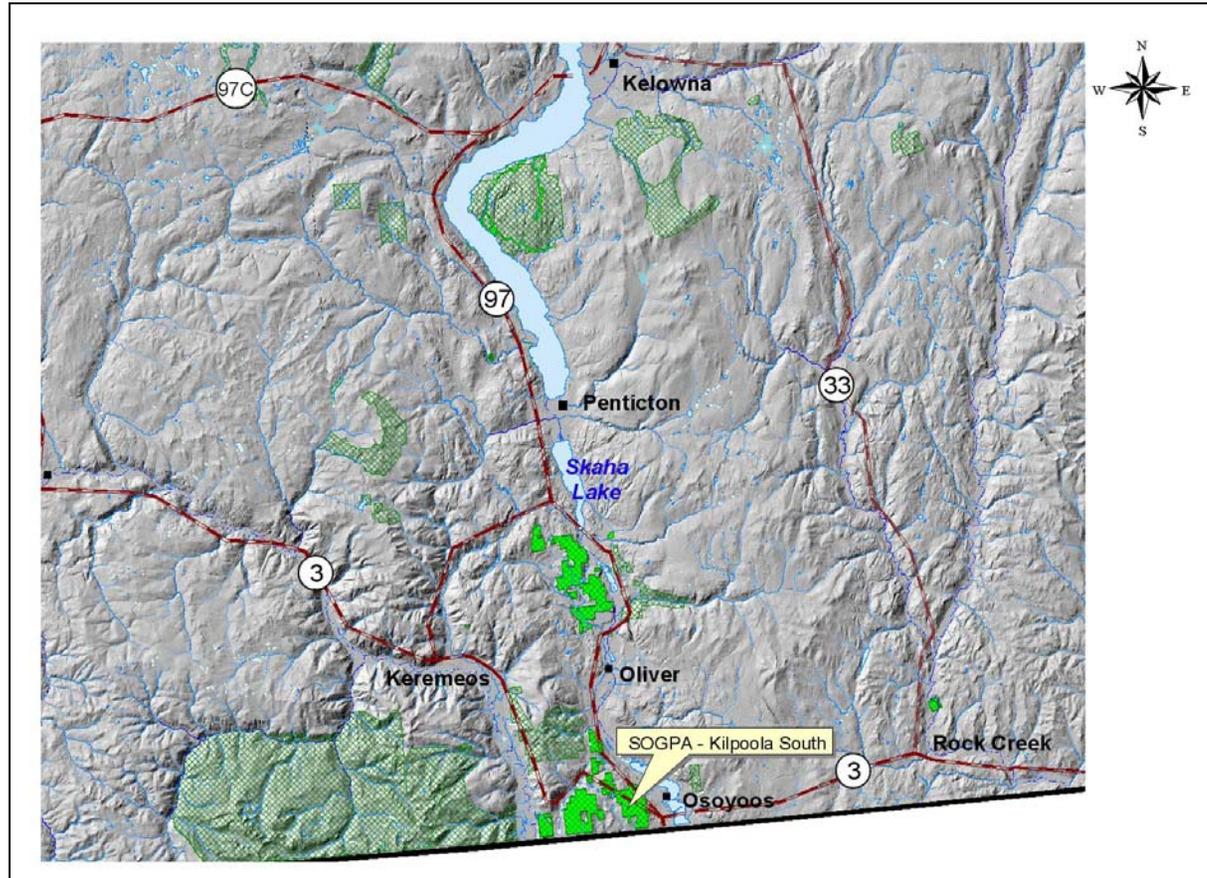
Two days (3 man-days) of invasive plant inventories were conducted through the South Okanagan Grasslands Protected Area of North Kilpoola in October of 2006. Inventory efforts for this area focused on main roads, secondary roads and previously uninventoried areas. Results identified 14 invasive plant species including patches of kochia, Russian thistle, Canada thistle, sheep sorrel, redroot pigweed, diffuse knapweed, hound's-tongue, bull thistle and mustard from the park entrance to the gravel pit area. Although mustard was mapped as wild mustard (WM), it was likely field mustard or mustard spp. One patch of puncturevine was also recorded where the gravel pit had expanded into the park (KILPN 19). Diffuse knapweed was consistent along the road heading up the hillside with sporadic nodding thistle and a patch of Dalmatian toadflax. A few small patches of sulphur cinquefoil were observed near the northern boundary. One patch of Canada thistle and a larger area of redroot pigweed were observed along the western-most boundary. Other observations included patches of mustard with sporadic diffuse knapweed and bull thistle.

Recommended management options include:

- Chemical treatment of sulphur cinquefoil patches, as well as bull thistle and nodding thistle to prevent further spread
- Biological treatment and monitoring of diffuse knapweed and Canada thistle
- Manual removal of kochia, Russian thistle, and puncturevine

## Section 9B: South Okanagan Grasslands Protected Area

### *South Kilpoola*



**Figure 9B-1: SOGPA – South Kilpoola Overview**

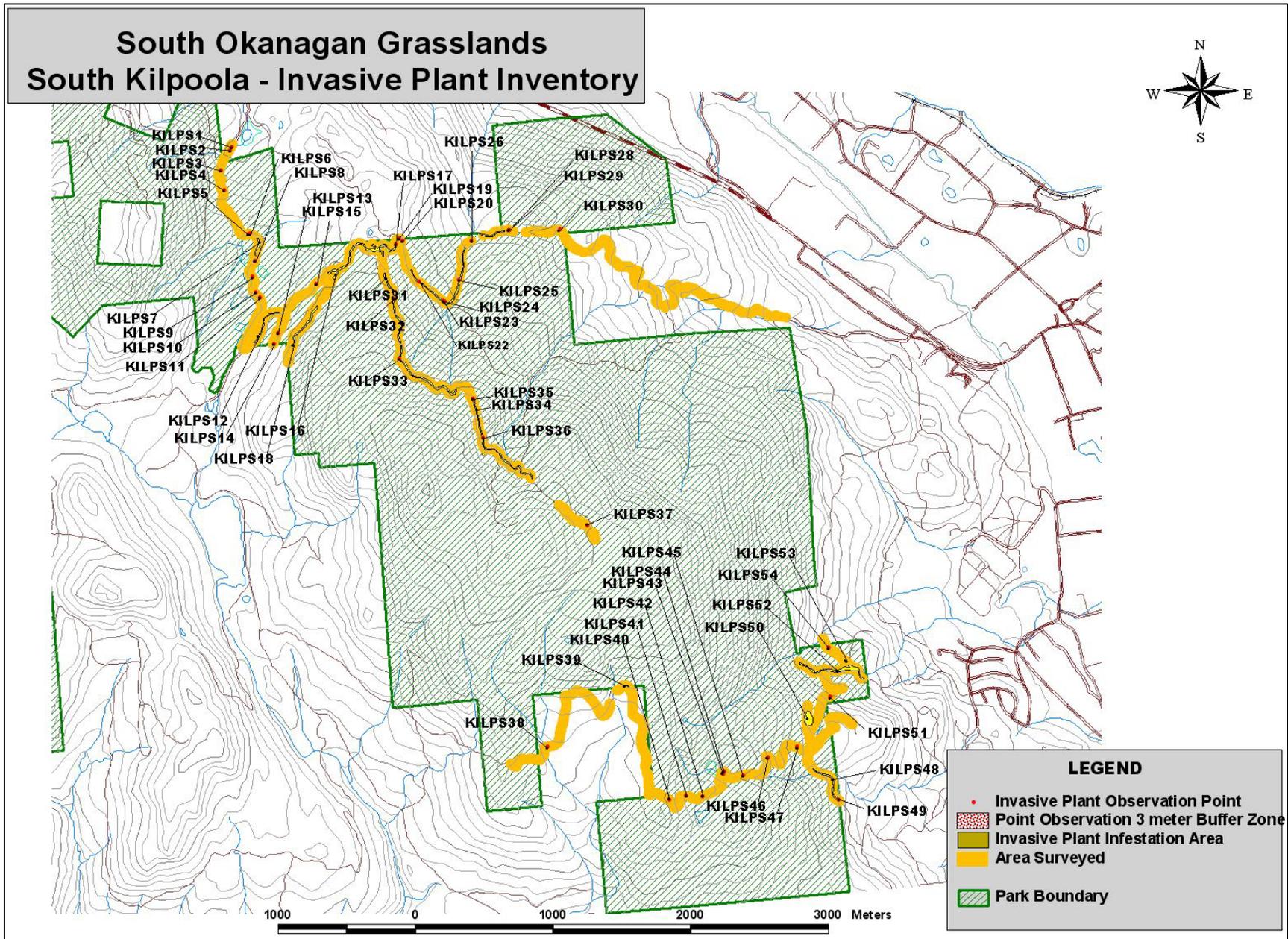


Figure 9B-2: SOGPA – South Kilpoola Invasive Plant Inventory

Paper File ID	Date	Species_1	Dc_1	Species_2	Dc_2	Species_3	Dc_3	UTM_E	UTM_N	Location	BEC classification(s)	Hectares
KILPS1	20061004	HT	3	CT	2	MU	2	313086	5436411	S. Kilpoola PA	IDF xh 1	0.003
KILPS2	20061004	CT	3	BT	1			313072	5436388	S. Kilpoola PA	IDF xh 1	0.003
KILPS3	20061004	HT	4	CT	2	MU	4	312986	5436253	S. Kilpoola PA	IDF xh 1	0.003
KILPS4	20061004	HT	2	BT	2	MU	4	312990	5436103	S. Kilpoola PA	IDF xh 1	0.003
KILPS5	20061004	DT	5	HT	4	MU	4	313125	5435766	S. Kilpoola PA	IDF xh 1	0.003
KILPS6	20061004	CT	3	HT	4	RP	2	313139	5435768	S. Kilpoola PA	IDF xh 1	0.003
KILPS7	20061004	CT	5					313206	5435699	S. Kilpoola PA	IDF xh 1	0.15
KILPS8	20061004	HT	4	MU	4			313152	5435569	S. Kilpoola PA	IDF xh 1	0.003
KILPS9	20061004	CT	4	HT	2			313120	5435455	S. Kilpoola PA	IDF xh 1	0.003
KILPS10	20061004	CT	2	MU	5			313126	5435337	S. Kilpoola PA	IDF xh 1	0.003
KILPS11	20061004	BT	2					313155	5435300	S. Kilpoola PA	IDF xh 1	0.003
KILPS12	20061004	HT	4	MU	4			313076	5434991	S. Kilpoola PA	IDF xh 1	0.194
KILPS13	20061004	BT	3	MU	3			313251	5435028	S. Kilpoola PA	IDF xh 1	0.003
KILPS14	20061004	HT	2	MU	3			313214	5434956	S. Kilpoola PA	IDF xh 1	0.003
KILPS15	20061004	HT	2	BT	1	MU	3	313571	5435347	S. Kilpoola PA	IDF xh 1	0.003
KILPS16	20061004	HT	4	MU	5			313708	5435380	S. Kilpoola PA	IDF xh 1	0.961
KILPS17	20061004	BT	2					314178	5435561	S. Kilpoola PA	IDF xh 1	0.003
KILPS18	20061004	HT	2	MU	2			313363	5434981	S. Kilpoola PA	IDF xh 1	0.359
KILPS19	20061004	DT	3					314207	5435601	S. Kilpoola PA	IDF xh 1	0.003
KILPS20	20061004	DK	2					314227	5435578	S. Kilpoola PA	IDF xh 1	0.003
KILPS21	20061004	HT	2	MU	5			314477	5435105	S. Kilpoola PA	IDF xh 1	0.731
KILPS22	20061004	BT	1					314313	5435268	S. Kilpoola PA	IDF xh 1	0.003
KILPS23	20061004	DT	1					314468	5435113	S. Kilpoola PA	IDF xh 1	0.003
KILPS24	20061004	DT	2					314477	5435105	S. Kilpoola PA	IDF xh 1	0.003
KILPS25	20061004	DK	2					314061	5435245	S. Kilpoola PA	IDF xh 1	0.003
KILPS26	20061004	BT	1					314728	5435516	S. Kilpoola PA	IDF xh 1	0.003
KILPS27	20061004	HT	6					314825	5435549	S. Kilpoola PA	IDF xh 1	0.155
KILPS28	20061004	CB	3					315003	5435562	S. Kilpoola PA	IDF xh 1	0.003
KILPS29	20061004	BT	2					315009	5435563	S. Kilpoola PA	IDF xh 1	0.003
KILPS30	20061004	DK	2					315371	5435519	S. Kilpoola PA	PP xh 1a	0.003

**Table 9B-1: SOGPA – South Kilpoola Invasive Plant Inventory Data**

Paper File ID	Date	Species_1	Dc_1	Species_2	Dc_2	Species_3	Dc_3	UTM_E	UTM_N	Location	BEC classification(s)	Hectares
KILPS31	20061004	HT	2	DK	2	MU	5	314111	5435101	S. Kilpoola PA	IDF xh 1	1.093
KILPS32	20061004	CT	2					314112	5435171	S. Kilpoola PA	IDF xh 1	0.003
KILPS33	20061004	BT	1					314100	5434733	S. Kilpoola PA	IDF xh 1	0.003
KILPS34	20061004	HT	2	BT	5	MU	5	314885	5433788	S. Kilpoola PA	IDF xh 1	0.678
KILPS35	20061004	CT	2					314595	5434380	S. Kilpoola PA	IDF xh 1	0.003
KILPS36	20061004	DK	2					314633	5434090	S. Kilpoola PA	IDF xh 1	0.003
KILPS37	20061004	BT	3					315303	5433356	S. Kilpoola PA	IDF xh 1	0.003
KILPS38	20061010	CT	3	HT	3	BT	3	314818	5431798	S. Kilpoola PA	PP xh 1a	0.003
KILPS39	20061010	DK	2	CT	2	BT	2	315424	5432167	S. Kilpoola PA	PP xh 1a	0.022
KILPS40	20061010	DK	3					315650	5431307	S. Kilpoola PA	BG xh 1	0.003
KILPS41	20061010	DK	2					315773	5431319	S. Kilpoola PA	PP xh 1a	0.003
KILPS42	20061010	MU	3					315889	5431302	S. Kilpoola PA	PP xh 1a	0.003
KILPS43	20061010	CT	3	MU	5			316056	5431445	S. Kilpoola PA	PP xh 1a	0.003
KILPS44	20061010	DK	3	WM	5			316063	5431457	S. Kilpoola PA	PP xh 1a	0.003
KILPS45	20061010	DK	2					316198	5431412	S. Kilpoola PA	BG xh 1	0.003
KILPS46	20061010	HT	2	WM	3			316392	5431522	S. Kilpoola PA	BG xh 1	0.003
KILPS47	20061010	HT	2	DK	4	MU	2	316614	5431572	S. Kilpoola PA	BG xh 1	0.003
KILPS48	20061010	DK	2	HT	2	BT	2	316871	5431147	S. Kilpoola PA	BG xh 1	0.236
KILPS49	20061010	CT	3					316866	5431153	S. Kilpoola PA	BG xh 1	0.003
KILPS50	20061010	CT	3	HT	3	BT	3	316716	5431720	S. Kilpoola PA	BG xh 1 PP xh 1a	0.52
KILPS51	20061010	DK	3					316896	5431903	S. Kilpoola PA	BG xh 1	0.003
KILPS52	20061010	DK	2	HT	2			317133	5432028	S. Kilpoola PA	BG xh 1 PP xh 1a	0.749
KILPS53	20061010	Cockleburr Spp	5	BT	2			345742	5432148	S. Kilpoola PA	PP xh 1a	0.011
KILPS54	20061010	DK	3					316928	5432256	S. Kilpoola PA	PP xh 1a	0.003

**Table 9B-1: SOGPA – South Kilpoola Invasive Plant Inventory Data**

## ***SOGPA – South Kilpoola: Inventory Results and Recommendations***

Two days (4 man-days) of invasive plant inventories were conducted through the South Okanagan Grasslands Protected Area of South Kilpoola in October of 2006. Inventory efforts for this area focused on main roads, secondary roads and previously uninventoried areas. Results identified infestations of hound's-tongue, patches of Canada thistle, and sporadic diffuse knapweed and bull thistle. Other observations included a few patches of Dalmatian toadflax and one patch of burdock. Mullein occurred in both patchy and sporadic distributions throughout and mustard patches were recorded along the south road. Although mustard was mapped as wild mustard (WM), it was likely field mustard or mustard spp. A cockleburr spp (Figure 9B-3) was observed along the southeastern boundary, which appears to be moving into the park from a larger infestation outside the park boundary.

Recommended management options include:

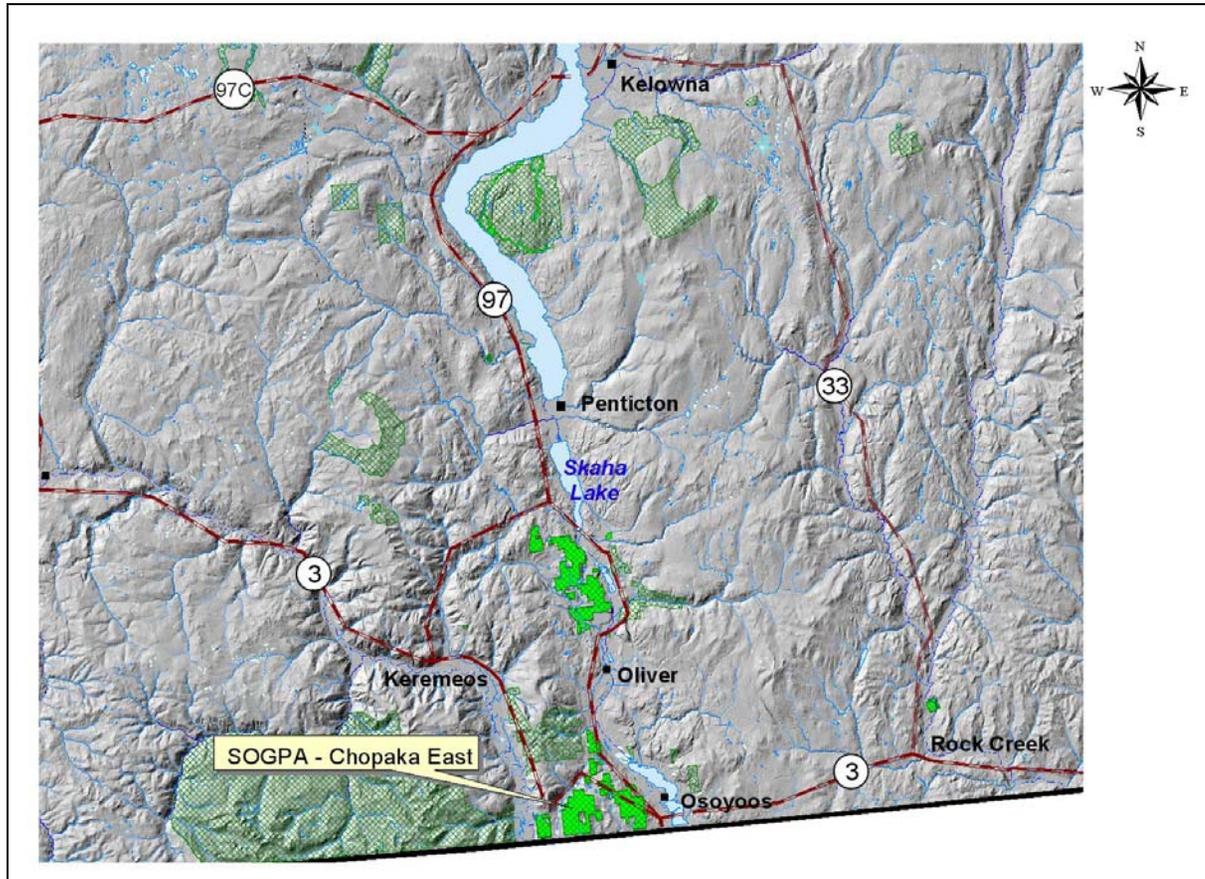
- Ongoing biological treatment of hound's-tongue, Canada thistle, Dalmatian toadflax and diffuse knapweed
- Manual removal of burdock and cockleburr spp



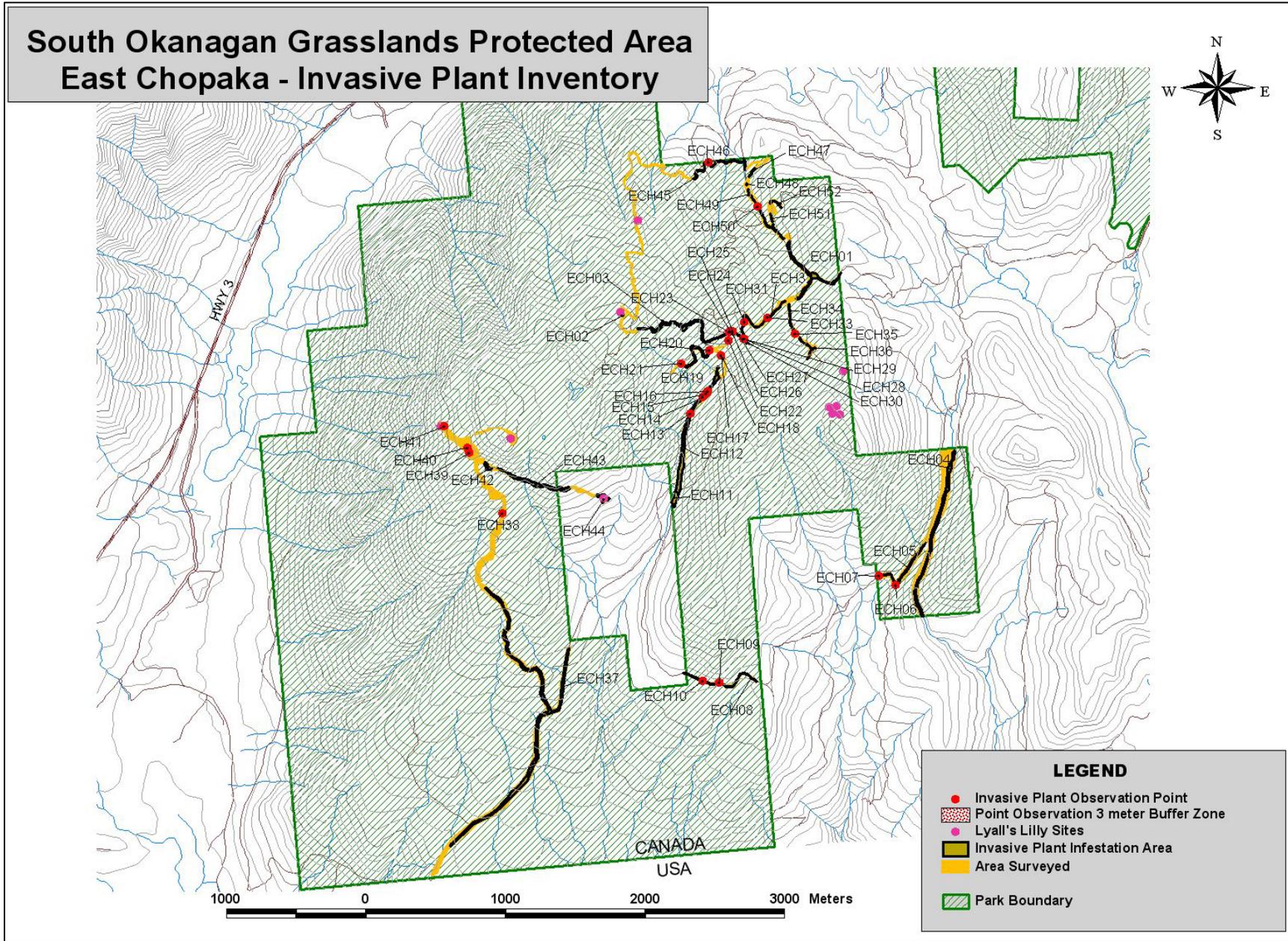
**Figure 9B-3: Cockleburr spp**

# Section 10A: South Okanagan Grasslands Protected Area

## *East Chopaka*



**Figure 10A-1: SOGPA – East Chopaka Overview**



**Figure 10A-2: SOGPA – East Chopaka Invasive Plant Inventory**

Paper File ID	Date	Species_1	Dc_1	Species_2	Dc_2	Species_3	Dc_3	UTM_E	UTM_N	Location	BEC classification(s)	Hectares
ECH01	20060930	HT	6	DK	4	CT	5	310454	5434742	E. Chopaka PA	IDF xh 1	0.938
ECH02	20060930	HT	2					309068	5434647	E. Chopaka PA	IDF xh 1	0.003
ECH03	20060930	DK	2	HT	2	SC	3	309538	5434530	E. Chopaka PA	IDF xh 1	0.897
ECH04	20061013	HT	4	CT	5	FT	5	311213	5433120	E. Chopaka PA	PP xh 1a	1.596
ECH05	20061013	DK	2	MU	5	WM	5	310818	5432546	E. Chopaka PA	PP xh 1a	0.387
ECH06	20061013	HT	1					310759	5432480	E. Chopaka PA	PP xh 1a	0.003
ECH07	20061013	BT	3					310650	5432558	E. Chopaka PA	PP xh 1a	0.003
ECH08	20061013	DK	4	MU	2	WM	5	309423	5431944	E. Chopaka PA	PP xh 1a	0.293
ECH09	20061013	BT	1					309423	5431944	E. Chopaka PA	PP xh 1a	0.003
ECH10	20061013	BT	3					309308	5431970	E. Chopaka PA	PP xh 1a	0.003
ECH11	20061013	HT	4	CB	2	BT	4	309255	5433241	E. Chopaka PA	IDF xh 1 PP xh 1a	0.276
ECH12	20061013	HT	7	DK	2	CT	5	309316	5433414	E. Chopaka PA	IDF xh 1	1.759
ECH13	20061013	CB	2					309457	5433888	E. Chopaka PA	IDF xh 1	0.003
ECH14	20061013	CB	2	HT	4	BT	2	309561	5433989	E. Chopaka PA	IDF xh 1	0.003
ECH15	20061013	CB	2					309585	5434011	E. Chopaka PA	IDF xh 1	0.003
ECH16	20061013	CB	2					309598	5434028	E. Chopaka PA	IDF xh 1	0.003
ECH17	20061013	BT	1					309728	5434271	E. Chopaka PA	IDF xh 1	0.003
ECH18	20061013	CT	6	HT	4	MU	5	309721	5434282	E. Chopaka PA	IDF xh 1	0.037
ECH19	20061013	CT	5	HT	4	DK	2	309580	5434339	E. Chopaka PA	IDF xh 1	0.389
ECH20	20061013	BT	2					309646	5434316	E. Chopaka PA	IDF xh 1	0.003
ECH21	20061013	BT	3	MU	7			309432	5434248	E. Chopaka PA	IDF xh 1	0.003
ECH22	20061013	CT	3	HT	4	MU	7	309793	5434369	E. Chopaka PA	IDF xh 1	0.003
ECH23	20061013	CT	3					309807	5434427	E. Chopaka PA	IDF xh 1	0.003
ECH24	20060930	NT	3					309811	5434432	E. Chopaka PA	IDF xh 1	0.003
ECH25	20060930	DK	2					309827	5434431	E. Chopaka PA	IDF xh 1	0.003
ECH26	20061013	HT	4	DK	2			309833	5434427	E. Chopaka PA	IDF xh 1	0.024
ECH27	20060930	DK	2					309869	5434400	E. Chopaka PA	IDF xh 1	0.013
ECH28	20061013	CT	3	MU	4			309903	5434369	E. Chopaka PA	IDF xh 1	0.003
ECH29	20060930	SC	3					309906	5434368	E. Chopaka PA	IDF xh 1	0.003
ECH30	20061013	HT	5					309903	5434400	E. Chopaka PA	IDF xh 1	0.061

**Table 10A-1: SOGPA – East Chopaka Invasive Plant Inventory Data**

Paper File ID	Date	Species_1	Dc_1	Species_2	Dc_2	Species_3	Dc_3	UTM_E	UTM_N	Location	BEC classification(s)	Hectares
ECH31	20061013	DK	2					309920	5434485	E. Chopaka PA	IDF xh 1	0.003
ECH32	20061013	HT	4	CT	5	BT	2	310002	5434441	E. Chopaka PA	IDF xh 1	0.167
ECH33	20060930	SC	3					310091	5434498	E. Chopaka PA	IDF xh 1	0.003
ECH34	20061013	SC	5	BT	2			310244	5434451	E. Chopaka PA	IDF xh 1	0.083
ECH35	20061013	BT	1					310273	5434359	E. Chopaka PA	IDF xh 1	0.003
ECH36	20061013	CT	5	HT	4	DK	2	310372	5434245	E. Chopaka PA	IDF xh 1	0.08
ECH37	20061013	DK	2	BT	4			308173	5431883	E. Chopaka PA	PP xh 1a BG xh 1 IDF xh 1	3.837
ECH38	20061013	CT	3					308031	5433339	E. Chopaka PA	IDF xh 1	0.003
ECH39	20061018	HT	2	MU	2			307850	5433803	E. Chopaka PA	IDF xh 1	0.003
ECH40	20061018	MU	2					307847	5433843	E. Chopaka PA	IDF xh 1	0.003
ECH41	20061018	MU	2					307697	5434014	E. Chopaka PA	IDF xh 1	0.003
ECH42	20061018	HT	2	MU	2			307988	5433677	E. Chopaka PA	IDF xh 1	0.11
ECH43	20061018	BT	2	MU	4	WM	5	308123	5433606	E. Chopaka PA	IDF xh 1	0.841
ECH44	20061018	MU	2	WM	5			308756	5433354	E. Chopaka PA	PP xh 1a	0.234
ECH45	20060930	HT	5					309862	5435660	E. Chopaka PA	IDF xh 1	0.327
ECH46	20060930	NT	3					309809	5435653	E. Chopaka PA	IDF xh 1	0.003
ECH47	20060930	HT	2					310128	5435566	E. Chopaka PA	IDF xh 1	0.074
ECH48	20060930	CT	8					310054	5435462	E. Chopaka PA	IDF xh 1	0.005
ECH49	20060930	HT	4	CT	5			310136	5435252	E. Chopaka PA	IDF xh 1	0.204
ECH50	20060930	DK	3					310120	5435299	E. Chopaka PA	IDF xh 1	0.003
ECH51	20060930	HT	2	DK	2			310207	5435184	E. Chopaka PA	IDF xh 1	0.01
ECH52	20060930	HT	4					310207	5435315	E. Chopaka PA	IDF xh 1	0.05

**Table 10A-1: SOGPA – East Chopaka Invasive Plant Inventory Data**

## ***SOGPA – East Chopaka: Inventory Results and Recommendations***

Three days (4 man-days) of invasive plant inventories were conducted through the South Okanagan Grasslands Protected Area of East Chopaka. Inventories through this area focused on main roads and secondary trails, previously uninventoried areas, and Lyall's Mariposa Lilly sites. Lilly sites along the eastern boundary were not assessed due to time constraints. Inventory results identified only a few sulphur cinquefoil patches. Hound's tongue was the dominant roadside species in the northern half of the park, mixed with sporadic diffuse knapweed, bull thistle, mullein and patches of Canada thistle. A couple patches of nodding thistle were recorded for this area as well. In the southern half of the park, diffuse knapweed was the dominant roadside species with patches of mustard and sporadic bull thistle off to the sides. Although mustard was mapped as wild mustard (WM), it was likely field mustard or mustard spp. Other observations included foxtail barley and Canada thistle patches along the southeast boundary and sporadic burdock distributions were recorded northeast of the Allison property.

Recommended management options include:

- Chemical spot-treatment of sulphur cinquefoil
- Biological control of hound's tongue, diffuse knapweed, and Canada thistle patches
- Manual removal of burdock and hound's-tongue seed

# Section 10B: South Okanagan Grasslands Protected Area

## West Chopaka

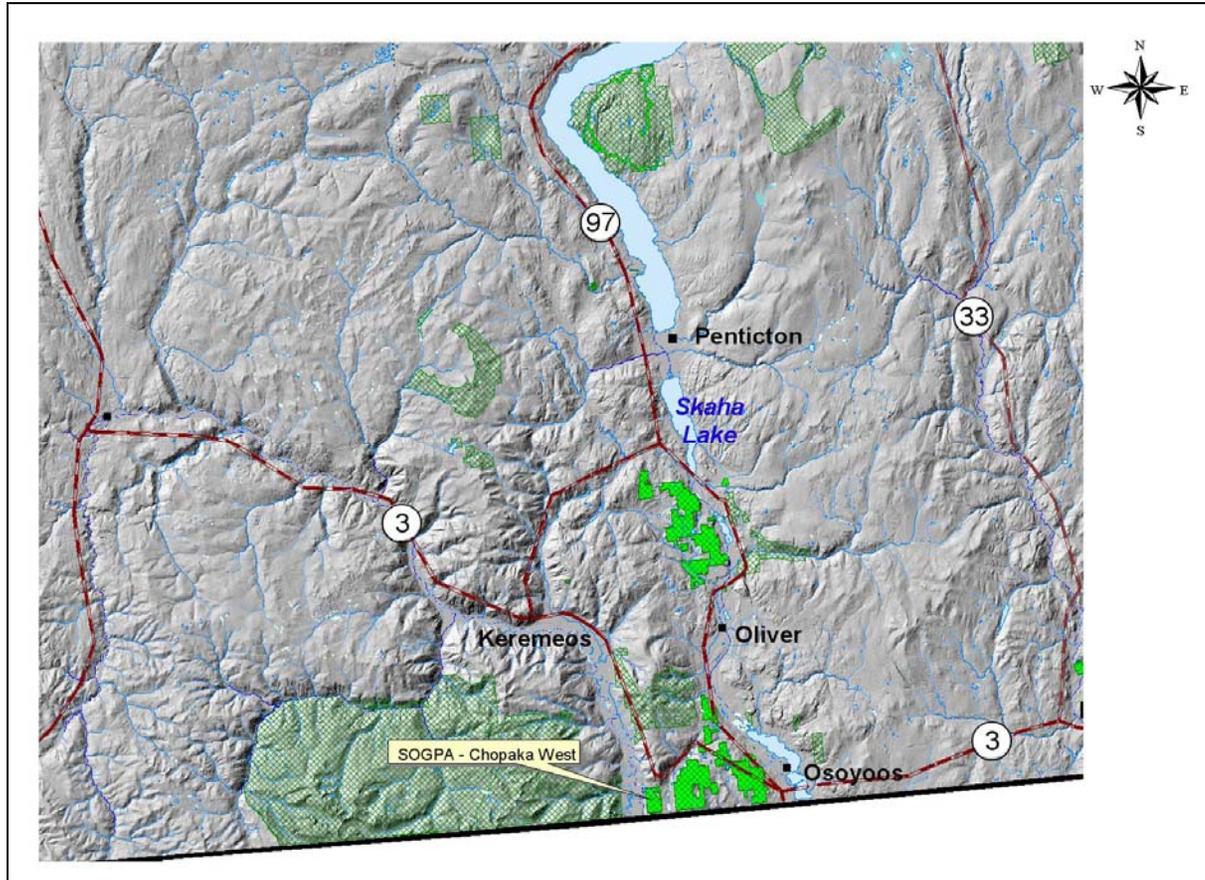


Figure 10B-1: SOGPA – West Chopaka Overview

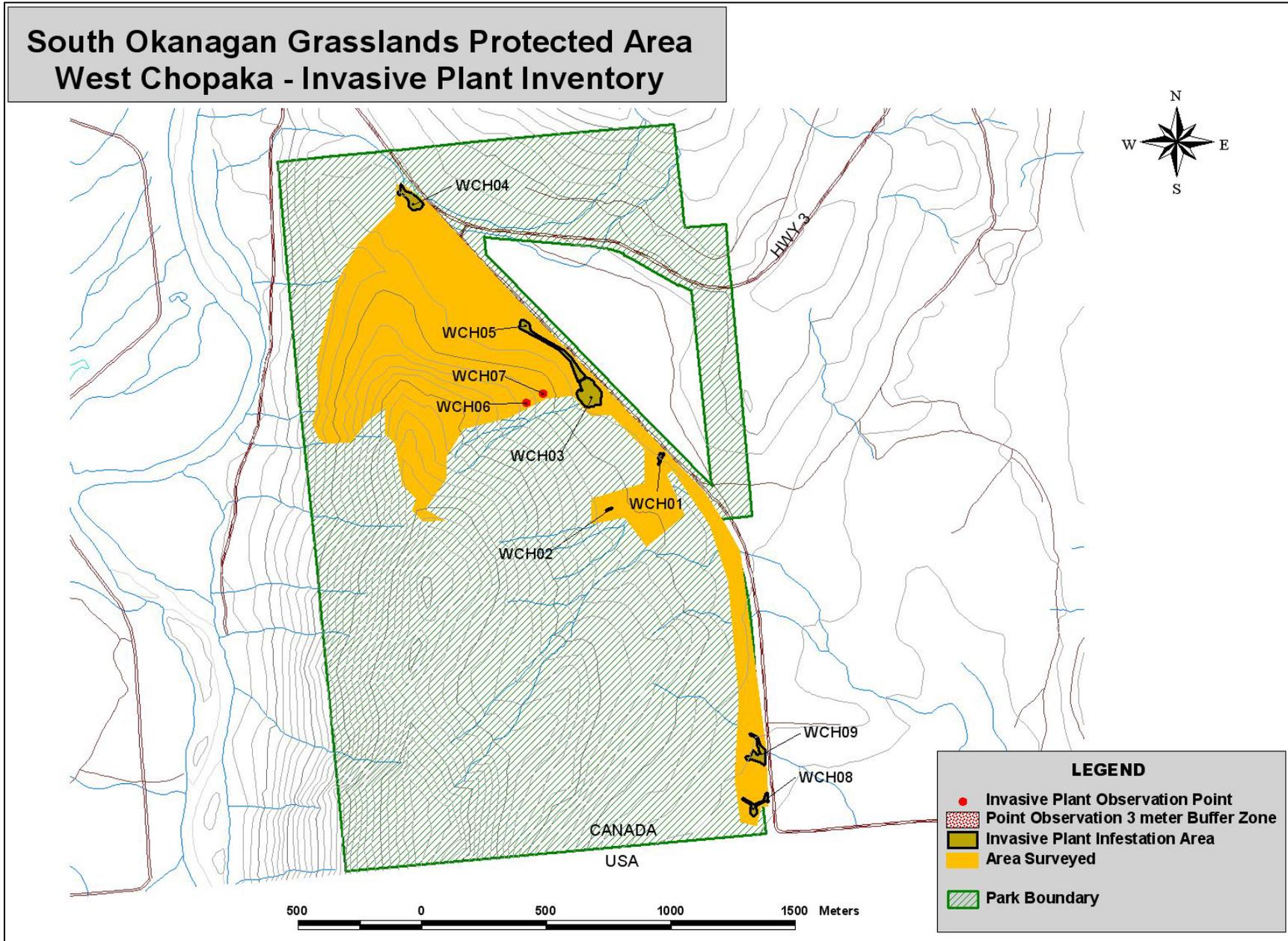


Figure 10B-2: SOGPA – West Chopaka Invasive Plant Inventory

Paper File ID	Date	Species_1	Dc_1	Species_2	Dc_2	Species_3	Dc_3	UTM_E	UTM_N	Location	BEC classification(s)	Hectares
WCH01	20061001	DK	2					304382	5432470	W. Chopaka PA	BG xh 1	0.051
WCH02	20061001	DK	2					304149	5432276	W. Chopaka PA	BG xh 1	0.005
WCH03	20061001	DK	5	RT	5			304127	5432805	W. Chopaka PA	BG xh 1	0.819
WCH04	20061001	RK	8	CT	3			303458	5433644	W. Chopaka PA	BG xh 1	0.403
WCH05	20061001	DK	2					303886	5433065	W. Chopaka PA	BG xh 1	0.576
WCH06	20061001	DK	1					303863	5432741	W. Chopaka PA	BG xh 1	0.003
WCH07	20061001	DK	2					303935	5432769	W. Chopaka PA	BG xh 1	0.003
WCH08	20061019	DK	2	WM	3			304565	5431005	W. Chopaka PA	BG xh 1	0.2
WCH09	20061019	DK	2					304620	5431249	W. Chopaka PA	BG xh 1	0.34

**Table 10B-1: SOGPA – West Chopaka Invasive Plant Inventory Data**

### ***SOGPA – West Chopaka: Inventory Results and Recommendations***

Two days of invasive plant inventories were conducted through the South Okanagan Grasslands Protected Area of West Chopaka. Inventory surveys identified infestation patches of Russian thistle, Russian and diffuse knapweed, Canada thistle and mustard. Although mustard was mapped as wild mustard (WM), it was likely field mustard or mustard spp. The vast majority of these observations occur close to the highway near park access roads. Very few weeds were observed for the area other than the identified patches and sporadic diffuse knapweed.

Recommended management options include:

- Chemical treatment of Russian thistle and Russian knapweed to prevent further spread
- Biological control of diffuse knapweed and Canada thistle patches
- Manual removal of sporadic diffuse knapweed and mustard patch to prevent further spread

# Section 11A: White Lake Grasslands Protected Area

## Seacrest

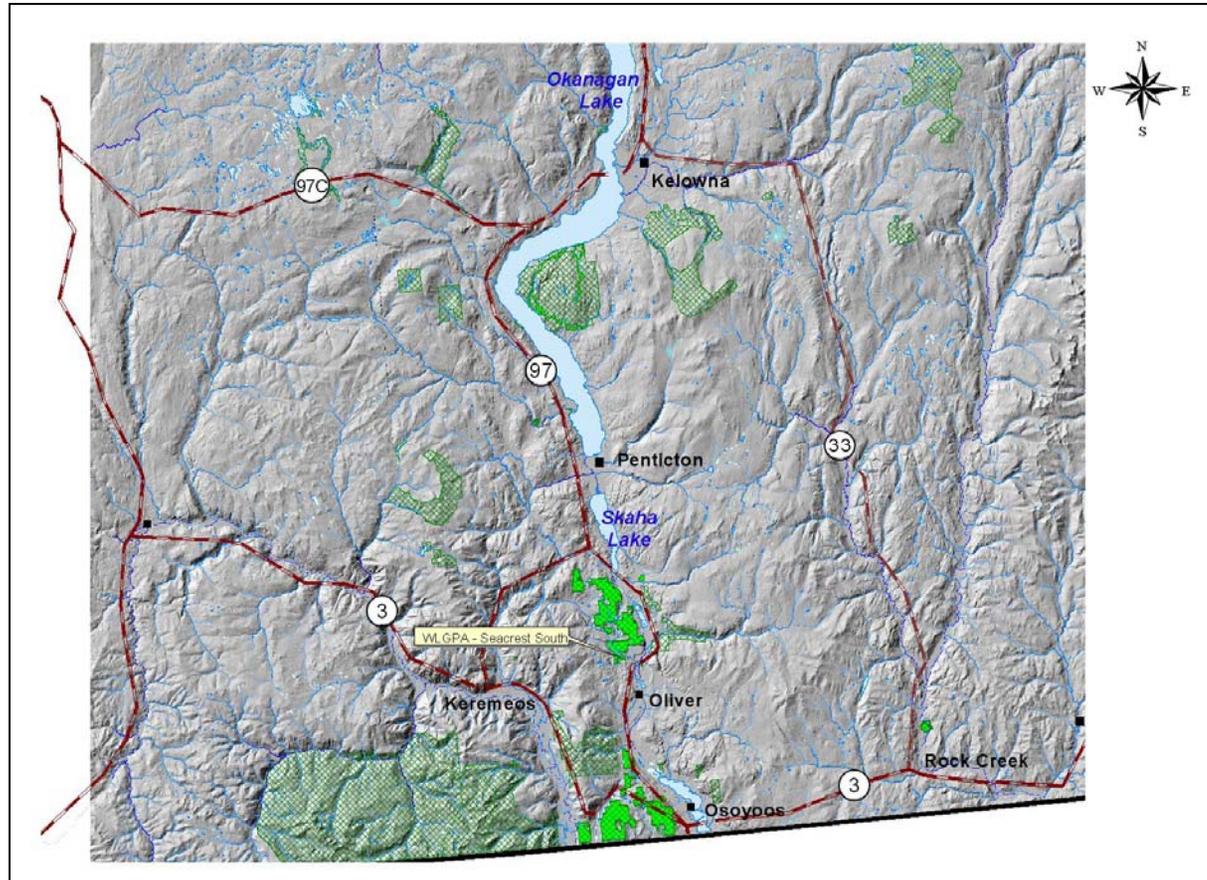


Figure 11A-1: WLGPA – Seacrest Overview

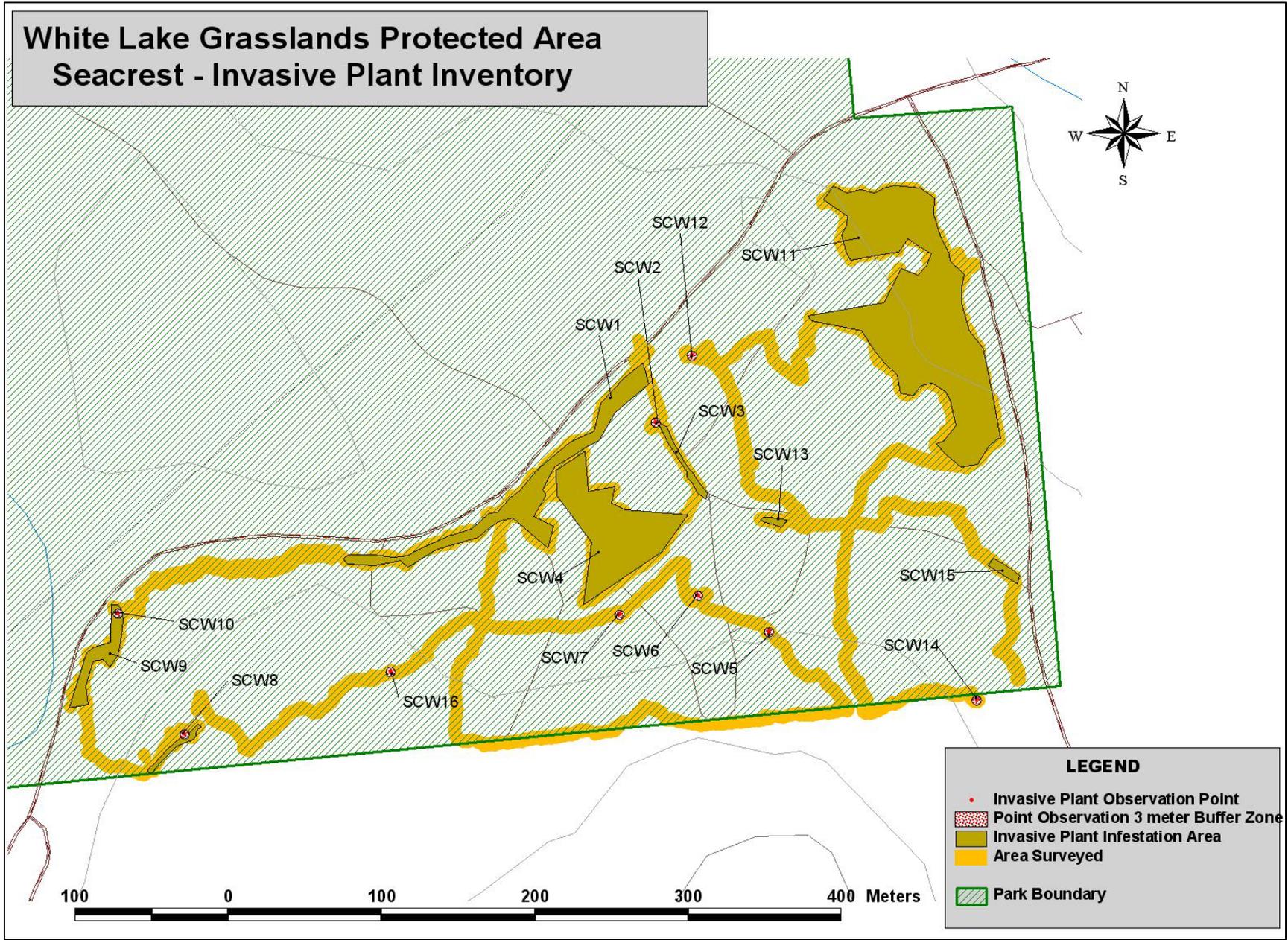


Figure 11A-2: WLGPA – Seacrest Invasive Plant Inventory

Paper File ID	Date	Species_1	Dc_1	Species_2	Dc_2	Species_3	Dc_3	UTM_E	UTM_N	Location	BEC classification(s)	Hectares
SCW1	20060920	SC	4	HT	2	DK	4	312631	5456853	S. Seacrest PA	PP xh 1	0.234
SCW2	20060920	DT	1					312636	5456816	S. Seacrest PA	PP xh 1	0.003
SCW3	20060920	RT	3	WM	5			312643	5456811	S. Seacrest PA	PP xh 1	0.019
SCW4	20060920	WM	6					312649	5456752	S. Seacrest PA	PP xh 1	0.328
SCW5	20060920	DT	3					312694	5456670	S. Seacrest PA	PP xh 1	0.003
SCW6	20060920	MU	3					312651	5456698	S. Seacrest PA	PP xh 1	0.003
SCW7	20060920	RT	1					312598	5456693	S. Seacrest PA	PP xh 1	0.003
SCW8	20060920	DT	3	WM	3			312302	5456648	S. Seacrest PA	PP xh 1	0.003
SCW9	20060920	DT	4	DK	2	HT	2	312239	5456683	S. Seacrest PA	PP xh 1	0.061
SCW10	20060920	SC	2					312273	5456735	S. Seacrest PA	PP xh 1	0.003
SCW11	20060920	DT	6	DK	5	SC	3	312814	5456919	S. Seacrest PA	PP xh 1	0.92
SCW12	20060920	SC	2					312665	5456856	S. Seacrest PA	PP xh 1	0.003
SCW13	20060920	DT	3	HT	2			312704	5456741	S. Seacrest PA	PP xh 1	0.007
SCW14	20060920	HT	2					312821	5456609	S. Seacrest PA	PP xh 1	0.003
SCW15	20060920	DK	4					312845	5456695	S. Seacrest PA	PP xh 1	0.012
SCW16	20060920	DK	3					312445	5456676	S. Seacrest PA	PP xh 1	0.003
SCW17	20060920	DK	4					312318	5456656	S. Seacrest PA	PP xh 1	0.014

**Table 11A-1: WLGPA – Seacrest Invasive Plant Inventory Data**

### ***WLGPA – Seacrest: Inventory Results and Recommendations***

One day (2 man-days) of invasive plant inventories was conducted through the White Lake Grasslands Protected Area of Seacrest in September of 2006. Inventory effort for this area focused on the south side of Seacrest road. Observations of concern for this area include patchy distributions of Dalmatian toad flax and sporadic distributions of sulphur cinquefoil, hound’s-tongue and diffuse knapweed. Other observations included patches of Russian thistle, mustard and mullein. Mustard was likely field mustard (**not WM**).

Recommended management options include:

- Chemical treatment of sulphur cinquefoil and Russian thistle to prevent further spread
- Biological control of Dalmatian toadflax

## Section 11B: White Lake Grasslands Protected Area

### *MacIntyre Bluff*

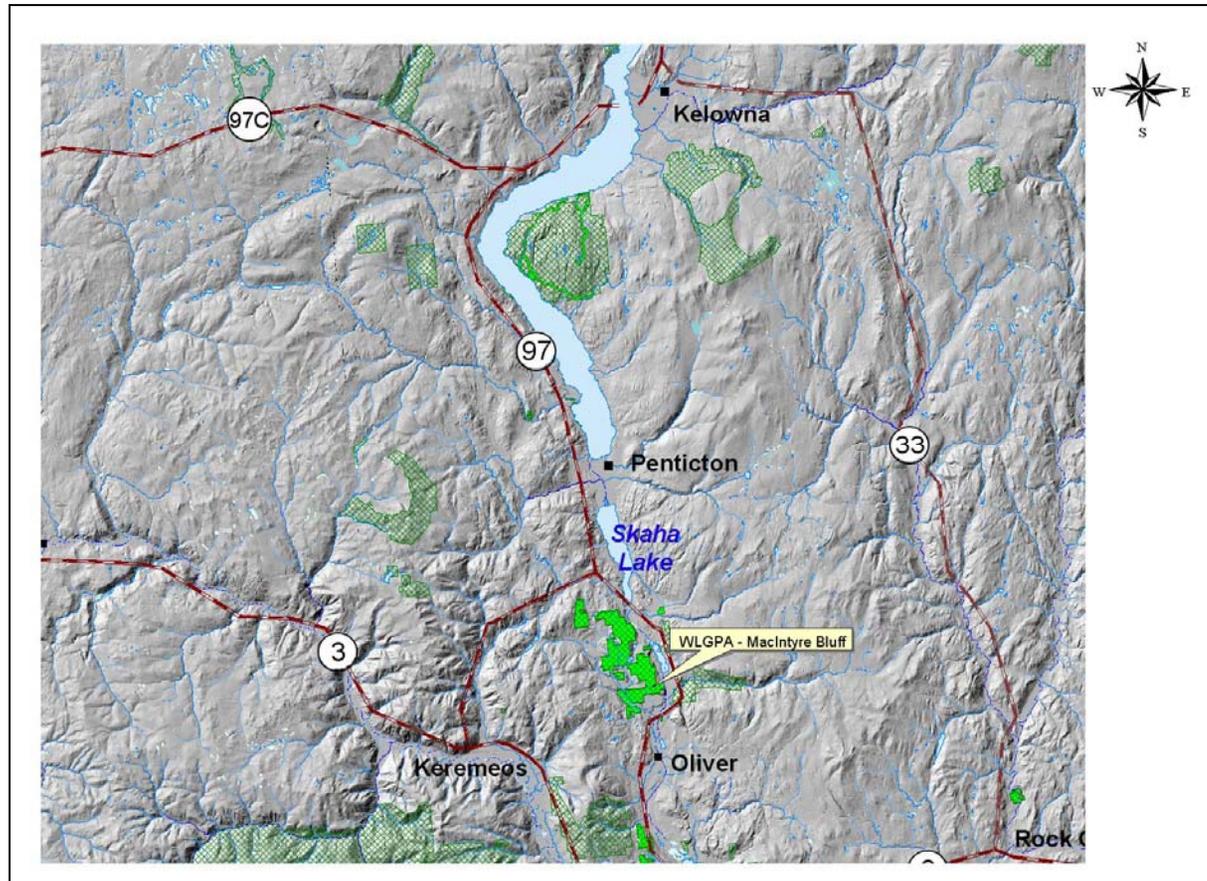


Figure 11B-1: WLGPA – MacIntyre Bluff Overview

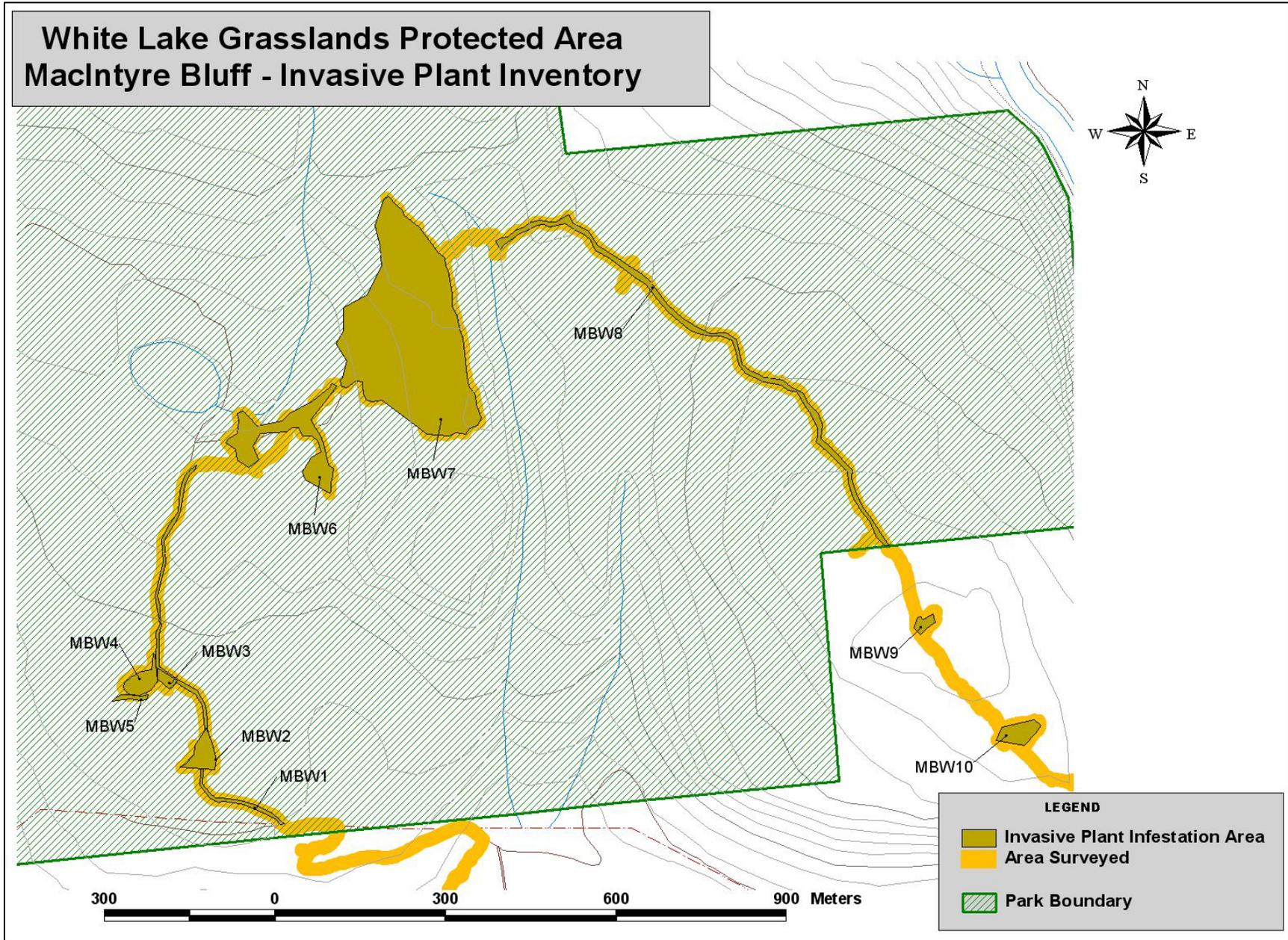


Figure 11B-2: WLGPA – MacIntyre Bluff Invasive Plant Inventory

Paper File ID	Date	Species_1	Dc_1	Species_2	Dc_2	Species_3	Dc_3	UTM_E	UTM_N	Location	BEC classification(s)	Hectares
MBW1	20060924	DK	4	SC	5			314400	5458654	McIntyre Bluff PA	BG xh 1 PP xh 1	0.415
MBW2	20060924	DT	3	SC	3			314275	5458766	McIntyre Bluff PA	BG xh 1	0.223
MBW3	20060924	MU	3	SC	5			314233	5458912	McIntyre Bluff PA	BG xh 1	0.066
MBW4	20060924	RK	3	CT	3	HT	4	314198	5458930	McIntyre Bluff PA	BG xh 1	0.201
MBW5	20060924	SC	5					314162	5458908	McIntyre Bluff PA	BG xh 1	0.046
MBW6	20060924	RK	5	CT	5	HT	2-4	314429	5459274	McIntyre Bluff PA	BG xh 1 PP xh 1	0.988
MBW7	20060924	SC	6	DK	4	DT	5	314640	5459411	McIntyre Bluff PA	PP xh 1	6.053
MBW8	20060924	DK	4	SC	5			314914	5459617	McIntyre Bluff PA	PP xh 1	0.814
MBW9	20060924	SC	1	BT	1	MU	5	315578	5458867	McIntyre Bluff PA	PP xh 1	0.074
MBW10	20060924	SC	3	DT	3	MU	3	315678	5458652	McIntyre Bluff PA	PP xh 1	0.218

**Table 11B-1: WLGPA – MacIntyre Bluff Invasive Plant Inventory Data**

### ***WLGPA – MacIntyre Bluff: Inventory Results and Recommendations***

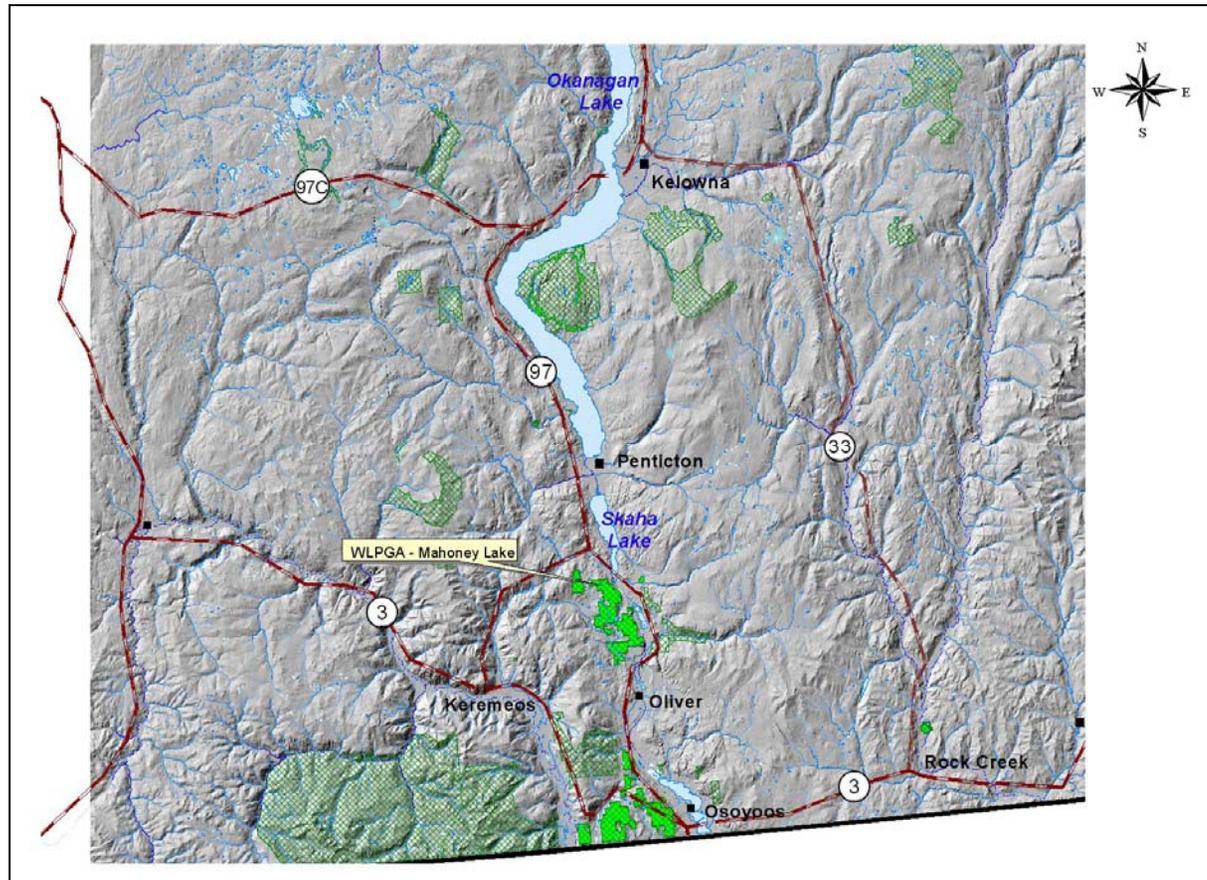
One day of invasive plant inventory was conducted through the White Lake Grasslands Protected Area in September of 2006. Inventories through this area focused on trails. Inventory results identified infestations of Dalmatian toadflax, sulphur cinquefoil, Russian knapweed and Canada thistle. Other observations included sporadic diffuse knapweed, hound’s-tongue, bull thistle and mullein.

Recommended management options include:

- Chemical treatment of sulphur cinquefoil to reduce spread
- Biological control of Dalmatian toadflax, Canada thistle, diffuse knapweed and hound’s-tongue
- Manual removal of Russian knapweed

## Section 11C: White Lake Grasslands Protected Area

### *Mahoney Lake*



**Figure 11C-1: WLGPA – Mahoney Lake Overview**

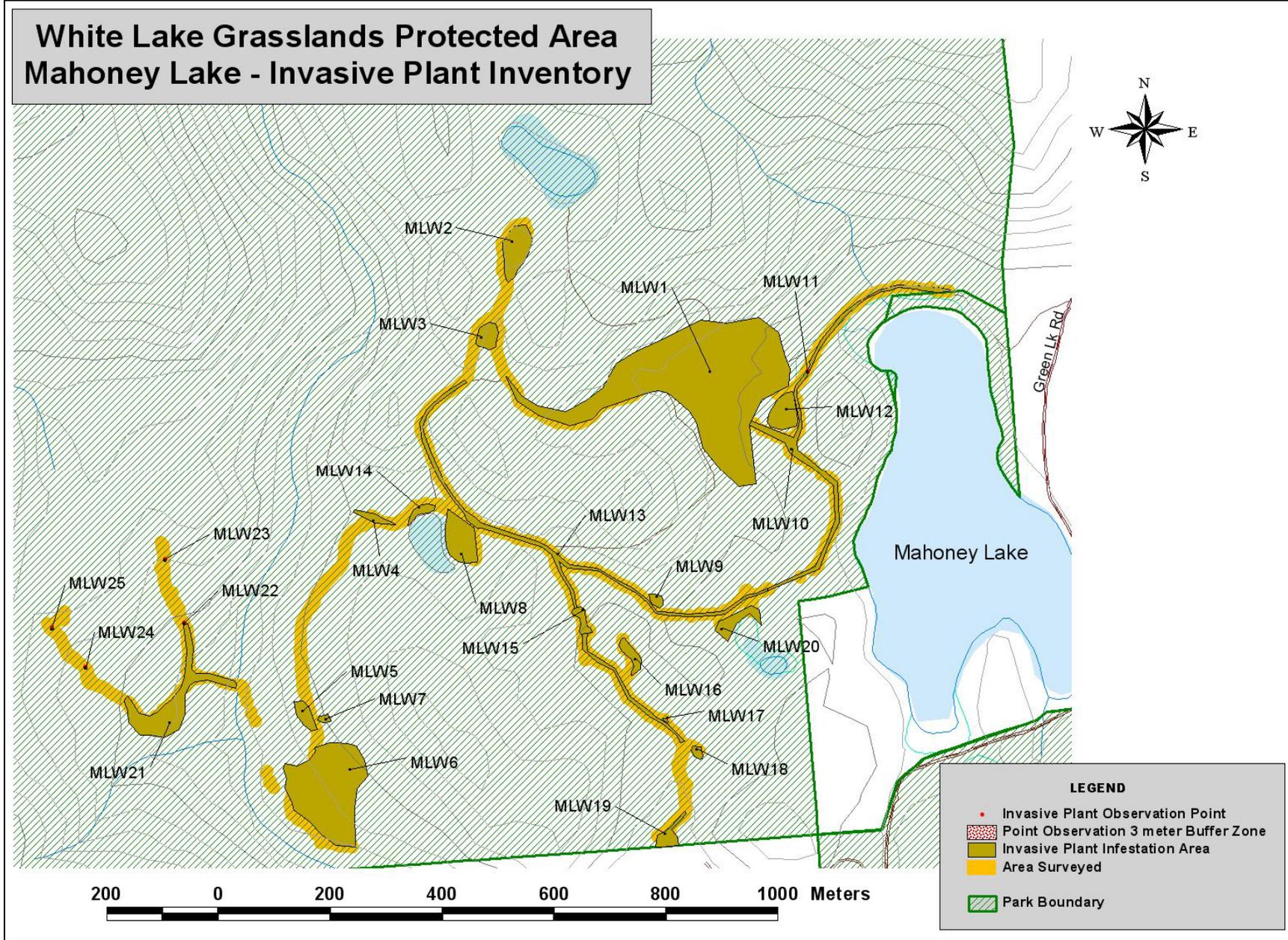


Figure 11C-2: WLGPA – Mahoney Lake Invasive Plant Inventory

Paper File ID	Date	Species_1	Dc_1	Species_2	Dc_2	Species_3	Dc_3	UTM_E	UTM_N	Location	BEC classification(s)	Hectares
MLW1	20060921	SC	2-4	DK	2-4	BT	2-4	311950	5463142	Mahoney Lk PA	PP xh 1	5.415
MLW2	20060921	HT	4	CT	5	MU	4	311505	5463335	Mahoney Lk PA	PP xh 1	0.356
MLW3	20060921	RK	3	CT	3	HT	3	311444	5463258	Mahoney Lk PA	PP xh 1	0.146
MLW4	20060921	SC	2	DK	2			311182	5462961	Mahoney Lk PA	PP xh 1	0.075
MLW5	20060921	SC	3	DK	2	MU	1	311042	5462622	Mahoney Lk PA	PP xh 1	0.117
MLW6	20060921	SC	6	DK	2	BT	2	311016	5462513	Mahoney Lk PA	PP xh 1	1.83
MLW7	20060921	SC	2	BT	3			311090	5462600	Mahoney Lk PA	PP xh 1	0.026
MLW8	20060921	SC	4	DK	4			311356	5462905	Mahoney Lk PA	PP xh 1	0.398
MLW9	20060921	SC	5	DK	2-4			311705	5462743	Mahoney Lk PA	PP xh 1	0.044
MLW10	20061019	DK	4					312024	5463125	Mahoney Lk PA	PP xh 1	0.631
MLW11	20061019	HT	3	BT	3			312015	5463111	Mahoney Lk PA	PP xh 1	0.003
MLW12	20061019	RK	3	CT	3	HT	2	311964	5463043	Mahoney Lk PA	PP xh 1	0.261
MLW13	20061019	DK	4	BT	2			311403	5463168	Mahoney Lk PA	PP xh 1	0.781
MLW14	20061019	BT	3	CT	3	DK	4	311325	5462955	Mahoney Lk PA	PP xh 1	0.071
MLW15	20061019	SC	3					311558	5462733	Mahoney Lk PA	PP xh 1	0.078
MLW16	20061019	RK	3	DK	2	BT	2	311630	5462676	Mahoney Lk PA	PP xh 1	0.103
MLW17	20061019	RK	3					311685	5462525	Mahoney Lk PA	PP xh 1	0.004
MLW18	20061019	RK	3	MU	3			311739	5462464	Mahoney Lk PA	PP xh 1	0.035
MLW19	20061019	SC	6	DK	4			311670	5462331	Mahoney Lk PA	PP xh 1	0.118
MLW20	20061019	RK	5	DK	3			311863	5462698	Mahoney Lk PA	PP xh 1	0.182
MLW21	20061019	DK	5	MU	2			310738	5462679	Mahoney Lk PA	PP xh 1	0.746
MLW22	20061011	RK	3					310855	5462802	Mahoney Lk PA	PP xh 1	0.003
MLW23	20061011	BT	2					310834	5462918	Mahoney Lk PA	PP xh 1	0.003
MLW24	20061011	BT	2					310671	5462746	Mahoney Lk PA	PP xh 1	0.003
MLW25	20061011	BT	4					310619	5462821	Mahoney Lk PA	PP xh 1	0.003

**Table 11C-1: WL GPA – Mahoney Lake Invasive Plant Inventory Data**

### ***WLGPA – Mahoney Lake: Inventory Results and Recommendations***

Three days of invasive plant inventories were conducted through the White Lake Grasslands Protected Area of Mahoney Lake in September and October of 2006. Inventories were focused on the White Headed Woodpecker habitat enhancement areas, west of Mahoney Lake. Results for this area identified patches of sulphur cinquefoil, Canada thistle, Russian knapweed, hound's-tongue, diffuse knapweed and bull thistle.

Recommended management options include:

- Chemical treatment of sulphur cinquefoil to prevent further spread
- Biological control of Canada thistle patches and diffuse knapweed
- Manual control of Russian knapweed and hound's-tongue

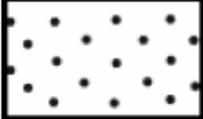
# APPENDIX – I

## Site and Invasive Plant Inventory Record Form

 		<b>SITE AND INVASIVE PLANT INVENTORY RECORD</b>						
DATA ENTERED INTO INVASIVE ALIEN PLANT PROGRAM <input type="checkbox"/>		ENTERED BY _____			TEMPORARY FIELD SITE # _____			
<b>SITE</b> <b>SITE ALREADY EXISTS</b> <input type="checkbox"/>								
SITE CREATED DATE * (YYYY-MM-DD)		MAPSHEET		(ASSIGNED AT DATA ENTRY)				
				SITE ID		TREATMENT ID		
PAPER FILE ID	DISTRICT CODE	RANGE UNIT ID	PASTURE					
SURVEY AGENCY *			EMPLOYER					
SURVEYOR(S)			JURISDICTION					
<b>GPS/UTM GRID</b>								
ZONE *	EASTING *	NORTHING *	OR	LATITUDE *	LONGITUDE *			
<b>BIOGEOCLIMATIC CLASS</b>								
ZONE	SUBZONE	VARIANT	PHASE	SITE SERIES				
<b>SITE CHARACTERISTICS</b>				<b>SITE SOIL TEXTURE</b>				
SLOPE %	ASPECT	ELEVATION (M)	COARSE <input type="checkbox"/> FINE <input type="checkbox"/> ORGANIC <input type="checkbox"/>					
<b>LOCATION/SITE</b>								
LOCATION				COMMENTS				
<b>INVASIVE PLANTS</b>								
FOR DATA ENTRY ENTER EACH SPECIES SEPARATELY	AREA * (Ha)	DISTRIBUTION CODE	SURVEY TYPE			DENSITY (PLANTS/m <sup>2</sup> )	SITE PRIORITY	PROPOSED ACTIVITY
			CURSORY	OPERATIONAL	PRECISE			M   C   B   NONE
PLANT SPECIES *			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	PROPOSED HERBICIDE			PROPOSED BIOAGENT				
PLANT SPECIES			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			M   C   B   NONE
	PROPOSED HERBICIDE			PROPOSED BIOAGENT				
PLANT SPECIES			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			M   C   B   NONE
	PROPOSED HERBICIDE			PROPOSED BIOAGENT				
PLANT SPECIES			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			M   C   B   NONE
	PROPOSED HERBICIDE			PROPOSED BIOAGENT				
COMMENTS								
SAME DATE AS SITE? <input type="checkbox"/> OR   SURVEY DATE (YYYY-MM-DD) _____ (*An invasive plant survey date is mandatory.)								
FS 1260 HSP 2006/06				NOTE: MANDATORY DATA FIELDS ARE INDICATED WITH *				

## APPENDIX – II

### Invasive Alien Plants – Code Index

Distribution Codes		
Code	Image	Description
1		Rare individual, a single occurrence
2		Few sporadically occurring individuals
3		Single patch or clump of a species
4		Several sporadically occurring individuals
5		A few patches or clumps of a species
6		Several well-spaced patches or clumps
7		Continuous uniform occurrence of well-spaced individuals
8		Continuous occurrence of a species with a few gaps in the distribution
9		Continuous dense occurrence of a species

<b>Species</b>			
<b>Common Name</b>	<b>Latin Name</b>	<b>Map Symbol</b>	<b>Genus/Species Code</b>
Annual sow thistle	<i>Sonchus oleraceus</i>	AS	SONC/OLE
Barnyard grass	<i>Echinochloa crusgalli</i>	BA	ECHI/CRU
Batchelor buttons	<i>Centaurea cyanus</i>	BB	CENT/CYA
Black Knapweed	<i>Centaurea nigra</i>	BL	CENT/NIG
Bladder campion	<i>Silene cucubalus</i>	BC	SILE/CUC
Blueweed	<i>Echium vulgare</i>	BW	ECHI/VUL
Bog rush	<i>Juncus effusus</i>	BR	JUNC/EFF
Broad-leaved plantain	<i>Plantago major</i>	BP	PLAN/MAJ
Brown Knapweed	<i>Centuarea jacea</i>	BK	CENT/JAC
Bull thistle	<i>Cirsium vulgare</i>	BT	CIRS/VUL
Burdock species	<i>Arctium spp</i>	BU	ARCT/SPP
Canada thistle	<i>Cirsium arvense</i>	CT	CIRS/ARV
Caraway	<i>Carum carvi</i>	CA	CARU/CAR
Chicory	<i>Cichorium intybus</i>	CY	CICH/INT
Chilean tarweed	<i>Madia sativa</i>	CH	MADI/SAT
Cleavers	<i>Galium aparine</i>	CV	GALI/APA
Cluster tarweed	<i>Amsinckia intermedia</i>	CE	AMSI/INT
Cluster tarweed	<i>Madia glomerata</i>	CW	MADI/GLO
Common bugloss	<i>Anchusa officinale</i>	AO	ANCH/OFF
Common burdock	<i>Arctium minus</i>	CB	ARCT/MIN
Common chickweed	<i>Stellaria media</i>	CK	STEL/MED
Common crupina	<i>Crupina vulgaris</i>	CC	CRUP/VUL
Common hawkweed	<i>Hieracium vulgatum</i>	CX	HEIR/VUL
Common mallow	<i>Malva neglecta</i>	CM	MALV/NEG
Common tansy	<i>Tanacetum vulgare</i>	TC	TANA/VUL
Corn spurry	<i>Spergula arvensis</i>	CO	SPER/ARV
Cow parsnip	<i>Heracleum lanatum</i>	CP	HERA/LAN
Creeping buttercup	<i>Ranunculus repens</i>	CR	RANU/REP
Cudweed	<i>Gnaphalium uliginosum</i>	CU	GNAP/ULI
Curled dock	<i>Rumex crispus</i>	CD	RUME/CRI
Cypress spurge	<i>Euphorbia cyprissiae</i>	CS	EUPH/CYP

<b>Species</b>			
<b>Common Name</b>	<b>Latin Name</b>	<b>Map Symbol</b>	<b>Genus/Species Code</b>
Dalmatian toadflax	<i>Linaria dalmatica</i>	DT	LINA/DAL
Dame's rocket	<i>Hesperis matronalis</i>	DR	HESP/MAT
Diffuse knapweed	<i>Centaurea diffusa</i>	DK	CENT/DIF
Dodder	<i>Cuscuta</i> spp.	DO	CUSC/SPP
English ivy	<i>Hedera helix</i>	EI	HEDE/HEL
European hawkweed	<i>Hieracium sabaudum</i>	EH	HIER/SAB
Eyebright	<i>Euphrasia nemorosa</i>	EY	EUPH/NEM
Field bindweed	<i>Convolvulus arvensis</i>	FB	CONV/ARV
Field horsetail	<i>Equisetum arvense</i>	FH	EQUI/ARV
Field scabious	<i>Knautia arvensis</i>	FS	KNAU/ARV
Foxtail barley	<i>Hordeum jubatum</i>	FT	HORD/JUB
Giant burdock	<i>Arctium lappa</i>	GB	ARCT/LAP
Giant hogweed	<i>Heracleum mantegazzianum</i>	GH	HERA/MAN
Giant knotweed	<i>Polygonum sachalinense</i>	GK	POLY/SAC
Gorse	<i>Ulex europaeus</i>	GO	ULEX/EUR
Greater knapweed	<i>Centaurea scabiosa</i>	GN	CENT/SCA
Green foxtail	<i>Setaria viridis</i>	GF	SETA/VIR
Gronovius hawkweed	<i>Hieracium gronovii</i>	GW	HIER/GRO
Groundsel	<i>Senecio vulgaris</i>	GS	SENE/VUL
Hawksbeard	<i>Crepis tectorum</i>	HB	CREP/TEC
Hawkweed species	<i>Hieracium</i> spp	HS	HIER/SPP
Hemp-nettle	<i>Galeopsis tetrahit</i>	HN	GALE/TET
Henbit	<i>Lamium amplexicaule</i>	HE	LAMI/AMP
Himalayan blackberry	<i>Rubis discolor</i>	HI	RUBI/DIS
Himalayan knotweed	<i>Polygonum polystachyum</i>	PO	POLY/POL
Hoary alyssum	<i>Berteroa incana</i>	HA	BERT/INC
Hoary cress	<i>Cardaria draba</i>	HC	CARD/DRA
Hound's-tongue	<i>Cynoglossum officinale</i>	HT	CYNO/OFF

<b>Species</b>			
<b>Common Name</b>	<b>Latin Name</b>	<b>Map Symbol</b>	<b>Genus/Species Code</b>
Japanese and giant knotweed hybrid	Polygonum X Bohemicum	PB	POLY/BOH
Japanese knotweed	Polygonum cuspidatum	JK	POLY/CUS
Jointed goatgrass	Aegilops cylindrica	JG	AEGI/CYL
King devil hawkweed	Hieracium floribundum	KH	HIER/FLO
Knapweed species	Centaurea spp.	KS	CENT/SPP
Kochia	Kochia scoparia	KO	KOCH/SCO
Lady's-thumb	Polygonum persicaria	LT	POLY/PER
Lamb's quarters	Chenopodium album	LQ	CHEN/ALB
Leafy spurge	Euphorbia esula	LS	EUPH/ESU
Leafy thistle	Cirsium foliosum	CF	CIRS/FOL
Marsh plume thistle/Marsh thistle	Cirsium palustre	MT	CIRS/PAL
Meadow buttercup	Ranunculus acris	MB	RANU/ACR
Meadow goats-beard	Tragopogon pratensis	MG	TRAG/PRA
Meadow hawkweed	Hieracium caespitosum	MH	HIER/CAE
Meadow knapweed	Centaurea debeuxii	MK	CENT/DEB
Mountain bluet	Centaurea montana	MO	CENT/MON
Mouse ear hawkweed	Hieracium pilosella	ME	HIER/PIL
Mullein	Verbascum thapsis	MU	VERB/THA
Narrowleaf hawkweed	Hieracium umbellatum	NH	HIER/UMB
Night-flowering catchfly	Silene noctiflora	NC	SILE/NOC
Nightshade	Solanum spp	NI	SOLA/SPP
Nodding beggar-ticks	Bidens cernua	NB	BIDE/CER
Nodding thistle	Carduus nutans	NT	CARD/NUT
Orange hawkweed	Hieracium aurantiacum	OH	HIER/AUR
Oxeye daisy	Leucanthemum vulgare	OD	LEUC/VUL
Perennial pepperweed	Lepidium latifolium	PP	LEPI/LAT
Perennial sow thistle	Sonchus arvensis	PS	SONC/ARV

<b>Species</b>			
<b>Common Name</b>	<b>Latin Name</b>	<b>Map Symbol</b>	<b>Genus/Species Code</b>
Pineappleweed	Matricaria matricariodes	PI	MATR/MAT
Plumeless thistle	Carduus acanthoides	PT	CARD/ACA
Poison hemlock	Conium maculatum	PH	CONI/MAC
Polar hawkweed	Hieracium atratum	PA	HIER/ATR
Puncturevine	Tribulus terrestris	PV	TRIB/TER
Purple loosestrife	Lythrum salicaria	PL	LYTH/SAL
Purple nutsedge	Cyperus rotundus	PN	CYPE/ROT
Quackgrass	Agropyron repens	QG	AGRO/REP
Queen devil hawkweed	Hieracium praealtum	QH	HIER/PRE
Redroot pigweed	Amaranthus retroflexus	RP	AMAR/RET
Rush skeletonweed	Chondrilla juncea	RS	CHON/JUN
Russian knapweed	Acroptilon repens	RK	ACRO/REP
Russian thistle	Salsola kali	RT	SALS/KAL
Scentless chamomile	Matricaria perforata	SH	MATR/PER
Scotch Broom	Cytisus scoparius	SB	CYTI/SCO
Scotch thistle	Onopordum acanthium	ST	ONOP/ACA
Sheep sorrel	Rumex acetosella	SS	RUME/ACE
Shepherd's-purse	Capsella bursa-pastoris	SP	CAPS/BUR
Showy milkweed	Asclepias speciosa	MW	ASCL/SPE
Smooth hawkweed	Hieracium laevigatum	SM	HIER/LAE
Sowthistle species	Sonchus species	SO	SONC/SPP
Spotted hawkweed	Hieracium maculatum	SX	HIER/MAC
Spotted knapweed	Centaurea biebersteinii	SK	CENT/BIE
St. John's wort/Saint John's wort/	Hypericum perforatum	SJ	HYPE/PER

<b>Species</b>			
<b>Common Name</b>	<b>Latin Name</b>	<b>Map Symbol</b>	<b>Genus/Species Code</b>
Goatweed			
Stinkweed	<i>Thlaspi arvense</i>	SW	THLA/ARV
Sulphur cinquefoil	<i>Potentilla recta</i>	SC	POTE/REC
Tall hawkweed	<i>Hieracium piloselloides</i>	TH	HIER/OID
Tansy ragwort	<i>Senecio jacobaea</i>	TR	SENE/JAC
Tartary buckwheat	<i>Fagopyrum tataricum</i>	TB	FAGO/TAT
Teasel	<i>Dipsacus fullonum</i>	TS	DIPS/FUL
Thistle species	<i>Cirsium species</i>	CI	CIRS/SPP
Toadflax species	<i>Linaria Species</i>	TP	LINA/SPP
Velvet leaf	<i>Abutilon theophrasti</i>	VL	ABUT/THE
Wall hawkweed	<i>Hieracium murorum</i>	WA	HIER/MUR
Water hemlock	<i>Cicuta douglasii</i>	WH	CICU/DOU
Western goat's-beard	<i>Tragopogon dubius</i>	WG	TRAG/DUB
Western stickseed	<i>Lappula occidentalis</i>	LO	LAPP/OCC
Whiplash hawkweed	<i>Hieracium flagellare</i>	WP	HIER/FLA
White cockle	<i>Lychnis alba</i>	WC	LYCH/ALB
Wild buckwheat	<i>Polygonum convolvulus</i>	WB	POLY/CON
Wild chervil	<i>Anthriscus sylvestris</i>	WI	ANTH/SYL
Wild mustard	<i>Sinapsis arvensis</i>	WM	SINA/ARV
Wild oats	<i>Avena fatua</i>	WO	AVEN/FAT
Witchgrass	<i>Panicum capillare</i>	WT	PANI/CAP
Wormwood	<i>Artemisia absinthium</i>	WW	ARTE/ABS
Yellow devil hawkweed	<i>Hieracium glomeratum</i>	YD	HIER/GLO
Yellow evening-primrose	<i>Oenothera villosa</i>	YP	OENO/VIL
Yellow hawkweed	<i>Hieracium pratense</i>	YH	HIER/PRA
Yellow iris	<i>Iris pseudochoris</i>	YI	IRIS/PSE

<b>Species</b>			
<b>Common Name</b>	<b>Latin Name</b>	<b>Map Symbol</b>	<b>Genus/Species Code</b>
Yellow nutsedge	Cyperus esculentus	YN	CYPE/ESC
Yellow starthistle	Centaurea solstitialis	YS	CENT/SOL
Yellow/common toadflax	Linaria vulgare	YT	LINA/VUL