Special Note

The partners of the SLELO PRISM have identified 24 Priority Conservation Areas on which we conduct early detection surveillance on a two year rotation. This report is to be considered as an addendum to the original field report. The original report is attached to the end of this report.

2014 Field Survey
Addendum to

Salmon River Estuary
Hydrilla and Water Chestnut Assessment

SLELO PRISM Early Detection Surveillance
June 4, 2014

Report prepared by Elizabeth MacEwen and Sabrina Dreythaler, 6/4/2014

Figure 1. View of Salmon River Estuary near Pine Grove boat launch, photo taken by Rob Williams.

Summary

In June of 2014, SLELO PRISM field crew members Sabrina Dreythaler and Elizabeth MacEwen, assisted by Rob Williams PRISM coordinator, revisited the Salmon River Estuary (Figure 1), to conduct early detection surveillance targeting Hydrilla (*Hydrilla verticillata)* and Water Chestnut (*Trapa natans)* within the highly probably areas (HPA's) previously studied in 2012. In addition to these species, crew members surveyed for additional 'Prevention List" species to include; Asian Clam (*Corbicula fluminea)* and Rusty Crayfish (*Orconectes rusticus)* .

Figure 2. Crew member Elizabeth MacEwen conducting a rake toss. Photo taken by Rob Williams

Observations

After surveying for Asian Clams and Rusty Crayfish, it was determined they are not present at HPA 4 which had a rocky substrate. After canoeing around the perimeter of the estuary, collecting samples using the standard rake-toss method (Figure 2) at each HPA, it was determined that Hydrilla is not present. However, juvenile Water Chestnut plants were found at HPA 5. **There were no 'Prevention "Watch-List" Species" found in the area** and the 'Target Management Species' that were observed in the area include: Water

Chestnut, Eurasian Water Milfoil, European Frog-bit and Japanese Knotweed. Between HPA 4 and HPA 5 there was a large amount of juvenile Eurasian Water Milfoil (*Myriophyllum spicatum*) and it is suggested that this area (43.56523° N, 76.19950° W) becomes a new HPA. Locations of HPA's within the estuary can be seen on Figure 3. Species observations made in our 2014 survey are shown in Table 1.

Figure 3. Map showing locations of the Salmon River Estuary HPA's and the route taken. Since Hydrilla and Water Chestnut prefer littoral waters, the crew members stayed near the shore line while collecting data, looking for these invasive species.

HPA-1: Port Ontario handicap accessible fishing dock
HPA-2: Narrow water channel with multiple private docks and a private marina
HPA-3: Area with stagnant to slow moving water in which site conditions create suitable invasive species habitat
HPA 4: Pine Grove boat launch is an area with high human movement.
HPA-5: Upstream of Pine Grove boat launch.
HPA-6: suggested new HPA, cove with slow moving water, upstream from Pine Grove boat launch

Table 1: Species observations made in our 2014 survey

Location: Salmon River Estuary							June 4, 2014
Point	**Latitude Longitude**	**Throw**	**Depth (ft)**	**#Spp**	**#Inv.**	**Invasive Species Present**	**Notes**
HPA 1	43.57035	1	5	0	0		Visual: JKW
	-76.1878	2		1	0		
HPA 2	43.57458	1	7.5	0	0		
	-76.2025	2		0	0		
HPA 3	43.56748	1	3	1	0		
	-76.1963	2		2	0		
HPA 4	43.56725	1	3.5	3	0		Visual: FB
	-76.2029	2		3	0		
HPA 5	43.56358	1	4	3	1	CLPW	Visual: WC, CLPW, FB, EM
	-76.1953	2		9	3	WC, CLPW, FB, EM	

Key: JKW: Japanese Knotweed, FB: European Frog-bit, CLPW: Curly-Leaf Pondweed
WC: Water Chestnut, EM: Eurasian Water Milfoil