

EGBI INVASIVE PHRAGMITES SITE MANAGEMENT PLAN 2021

SUMMARY

After preliminary ground truthing and aerial drone surveying, the FOWM (Friends of Wye Marsh) & SSEA (Severn Sound Environmental Association) have identified 7 distinct sites of invasive phragmites within the boundaries of the Wye Marsh - Provincial Wildlife Area (PWA). This report will review and provide site-specific management strategies to optimize the removal and disposal of invasive phragmites at each location.

INVASIVE PHRAGMITES SITE SUMMARIES

SITE 1: FOWM-PJ-001

ACCESS

FOWM-PJ-001 (Preston Cell Site) is located on the northeast portion of the berm in the Preston Cell. The berm is no longer an active trail system and is not a viable option for access to the site. Site access is exclusively aquatic, with one portage over a beaver dam. Boats can be brought by truck through the Preston Rd entrance.

MANAGEMENT

FOWM-PJ-001 is both a terrestrial and aquatic site, however the majority of the invasive phragmites is located on top of the berm. As a result, most of the site will be spaded with cut-to-drown being employed where possible.

REMOVAL/DISPOSAL

As one of the densest sites recorded, FOWM-PJ-001 is expected to have a large amount of biomass for disposal. Given the remoteness and accessibility challenges, FOWM would like to solarize all material on the top of the berm, using a heavy duty tarp that is staked down as a barrier to negate regrowth (FOWM will provide tarp).

EQUIPMENT REQUIRED

Equipment	Quantity
SPADES	5
HAND CUTTERS	3
POWER CUTTERS	2

CANOES	2
WADERS	3
TARP	1
STAKES	12

SITE 2: FOWM-PJ-002

ACCESS

FOWM-PJ-002 (Mud Lake Fen Site) is located west of Mud Lake, between the lake and Dufferin Aggregates Midland. The site is walk-in only, with the closest access point at the Town of Midland Operations Facility on MacDonald Rd. The hike in is approximately 1km through mixed deciduous forest, transitioning to mixed forest swamp, then open graminoid fen.

MANAGEMENT

FOWM-PJ-002 is both a terrestrial and aquatic site, however the majority of the invasive phragmites is located in the fen. At approximately 4000m², this site is not ideal for cut to drown or spading methods. Due to the remoteness and overall sensitivity of the area, it is also not very feasible to mechanically harvest using a Truxor. Hand management and/or controlled burning might be the only realistic control option for this site.

REMOVAL/DISPOSAL

As the most remote site documented, FOWM-PJ-002 poses the greatest disposal challenge. With the majority of the phragmites being located on fen and swamp there is a lack of appropriate terrain for solarization. Hauling to an external disposal facility or site is not feasible given the travel distance, quantity of material and organic substrate. More research to be completed by FOWM and SSEA on disposal for this site.

EQUIPMENT REQUIRED

Equipment	Quantity
SPADES	10
CANE CUTTERS	10
POWER CUTTERS	2
WADERS	2

SITE 3: FOWM-PJ-003

ACCESS

FOWM-PJ-003 (Cygnet Pond Site) is located on south of the lookout tower at the Wye Marsh Wildlife Centre. The site is unique, being the only area identified to this point that is on both the National

Wildlife Area (NWA) and PWA. The site is most easily accessed by foot off the Muskrat Trail on the NWA. Minimal disturbance should be encouraged while accessing this site.

MANAGEMENT

FOWM-PJ-003 is both a terrestrial and aquatic site, however the majority of the invasive phragmites is terrestrial. As a result, most of the site will be spaded with cut-to-drown being employed where possible.

REMOVAL/DISPOSAL

Since part of FOWM-PJ-003 is located on the NWA, more specific removal techniques will be required. Environment and Climate Change Canada (ECCC) has given approval to manage the site and transport material across the NWA to be disposed at the North Simcoe Transfer Station if required. PWA portion of the site will be piled and solarized in appropriate location.

EQUIPMENT REQUIRED

Equipment	Quantity
SPADES	
TARP	
STAKES	
CANOES	
WADERS	

SITE 4: FOWM-PJ-004

ACCESS

FOWM-PJ-004 (Bird Blind Site) is located northwest of the bird blind on the Waterfront I.D. Trail. It is most easily accessed using canoes. The site is on the very edge of the NWA & PWA but the property is owned by the Jesuits of St. Marie & the Martyr Shrine. FOWM has received approval from the Jesuits to manage this site as part of the EGBI project.

MANAGEMENT

FOWM-PJ-004 is a terrestrial site and will be spaded. If any aquatic phragmites is found, cut-to drown will be employed.

REMOVAL/DISPOSAL

Since FOWM-PJ-004 will be accessed by canoe from the NWA, harvested material will be transported across the NWA from the canoe, to the trailer, to the North Simcoe Transfer Station. As a result, more specific removal techniques will be required. ECCC requires seed head removal (if present) and careful containment of material prior to transport across NWA. FOWM will transport via enclosed truck and or covered trailer.

EQUIPMENT REQUIRED

Equipment	Quantity
SPADES	3
CANE CUTTERS	3
CANOES	1-2
WADERS	1-2
FOWM TRUCK	1

SITE 5: FOWM-PJ-005

ACCESS

FOWM-PJ-005 (St. Marie Site) is located on the west bank of the Wye River, across from St. Marie Among the Hurons, just below the control dam. The site can most easily accessed by foot across the control dam. Aquatic access also possible from the St. Marie Park Boat Launch.

MANAGEMENT

FOWM-PJ-005 is a terrestrial site and will be spaded. If any aquatic phragmites is found, cut-to drown will be employed. Due to steep bank and deep water, staff/volunteers will also be assigned to observe by canoe during spading to collect any material that may fall into the river.

REMOVAL/DISPOSAL

FOWM-PJ-005 is the least complicated disposal site. Given the high banks of the Wye River and the hydro clearing, the area directly west of the site is elevated and dry, which make for a perfect solarization location. Biomass will be placed on a staked down tarp and then solarized until it is no longer viable. Solarized material will be monitored between management seasons.

EQUIPMENT REQUIRED

Equipment	Quantity
SPADES	3
CANE CUTTERS	3
WADERS	1

SITE 6: FOWM-PJ-006

ACCESS

FOWM-PJ-006 (William Street Site) is located southwest of William Street along a hydro cut. The site can be easily accessed by truck from William Street to the hydro cut. The invasive phragmites is on the border of the PWA, with approximately half of the site on private land.

MANAGEMENT

FOWM-PJ-006 is a both a terrestrial and aquatic site. The PWA portion of the site is mostly aquatic, with the invasive phragmites growing in thicket swamp. The private section of the site is more terrestrial in nature. As a result, most of the site will be cut-to-drown, and if permission is received to manage the private portion, spading will also be used.

REMOVAL/DISPOSAL

FOWM-PJ-006 is a large site (approx. 1500m²) and expected to produce a large amount of biomass for disposal. Solarization is possible at the intersection of the hydro cut and William St trail, but is contingent on approval from hydro authorities. Transport to the North Simcoe Transfer Station but would require the rental of a bin or large trailer, which would incur additional costs.

EQUIPMENT REQUIRED

Equipment	Quantity
SPADES	7
CANE CUTTERS	7
POWER CUTTERS	2
TRAILER OR BIN	1-2
WADERS	3+

SITE 7: FOWM-PJ-007

ACCESS

FOWM-PJ-007 (Canoe Channel Site) is located near the second bend along the Wye Marsh guided canoe canals. Site access is exclusively aquatic, with nearest land accessibility at either the Wye Marsh canoe docks or St Marie dock.

MANAGEMENT

FOWM-PJ-007 is a both a terrestrial and aquatic site, however the majority of the invasive phragmites is located on top of a small island. As a result, most of the site will be spaded with cut-to-drown being employed around the perimeter.

REMOVAL/DISPOSAL

Given the aquatic terrain surrounding FOWM-PJ-007, solarization is not likely possible. Material will need to be harvested and transported by FOWM in either a full enclosed trailer or enclosed truck, across the NWA to the North Simcoe Transfer Station. As a result, more specific removal techniques will be required. ECCC requires seed head removal and careful containment of material prior to transport across NWA. Due to the larger quantity of material at this site, an additional boat (large canoe or flat bottom 'jon' boat) may be required for transport.

EQUIPMENT REQUIRED

Equipment	Quantity
SPADES	
TARP	
STAKES	
CANOES	
WADERS	

TIMELINE

Based on approximate site size, density, location, and removal/disposal methods, FOWM has proposed the following timeline to manage the documented invasive phragmites sites. Each site has been scheduled in order of feasibility/ease of management.

Date	Site	Estimated Hours	Estimated # of Staff/Volunteers Required	Partners Involved
August 9th	FOWM-PJ-005	4hrs	2-3	FOWM
August 10th	FOWM-PJ-004	4hrs	2-3	FOWM
August 11th – 12th	FOWM-PJ-003	12hrs	4-6	FOWM
August 13th – 17th	FOWM-PJ-001	12hrs	4-6	FOWM
August 23	FOWM-PJ-007	8hrs	4-6	FOWM SSEA
August 24-25	FOWM-PJ-006	8hrs	4-6	FOWM SSEA
-	FOWM-PJ-002	20hrs	6+	FOWM SSEA