# (South) Twin Ponds Restoration Plan 2017 Master Native Plant Stewardship Program Washington Native Plant Society



# **Work Plan Amendments**

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### Work Plan Comments from KCD

Great detail in weed removal techniques, covered most all concerns/challenges and how to address them. A few minor issues though:

Reed canary grass: Very difficult to remove by hand and can greatly disturb the soil/remove lots of topsoil. Unless it is a very small infestation, mowing + herbicide treatment for several years is highly recommended. If it is small and stewards do dig it out by hand, laying black shade fabric down for several seasons or sheet mulching with thick cardboard and 4-6" of mulch and staking willows through it is still recommended as RCG is very competitive, even with willows. Fabric will need to be removed in the future if that technique is chosen.

# From King County Noxious Weeds' BMPs:

- Manual: Not practical for any but the smallest patches. Hand dig when the ground is soft. Be sure to remove all roots and rhizomes. Any roots or rhizomes left in the soil will resprout. Monitor the site for regrowth. Properly dispose of all removed plant material.
- Shade: Cover with shade cloth or sheet mulch with several layers of cardboard and four to six inches of wood mulch. Leave in place for at least one growing season. Monitor the edges for shoots coming up from lateral growth of rhizomes. Efficacy can be increased by pre-treating with herbicide (allow enough time for the herbicide to kill the reed canary grass before covering), flaming, or removing above ground plant material at or just after flowering, either with hand tools or a line trimmer. Properly dispose of all removed plant material.

Italian arum: Great care needs to be taken as each plant has many 'daughter' tubers that will break off when the plant is dug up, and each can root to grow a new plant. At a minimum, cut and bag the fruit in August to minimize the spread of seeds. Appropriate protective clothing should be worn while performing this task. There aren't really any very effective treatment methods for this weed.

Removal of Norway Maples: If cutting, need to coordinate with herbicide applicator as this treatment needs to be done immediately after cutting, otherwise trees can re-sprout.

Timeline: It may just be a formatting error, but there is a huge chunk of time where no actions will be taken according to the current timeline: May of 2018 to April of 2019. If work is planned during this time, consider changing the heading to read Jan-Dec from left to right instead of starting it in May.

Concern – Removal method for reed canarygrass.

<u>Solution</u> – Stewards indicated that the reed canary grass areas are relatively small, in moist soil, and with shallow roots. Stewards maintain that manual removal followed by four inches of sheet mulch is feasible. Even so, willow stakes and at least <u>six</u> (not four) inches of sheet mulch<sup>1,2</sup> should be installed over these areas immediately upon invasive removal. (see page 8)

Concern – Removal method for Italian arum.

<u>Solution</u> – The stewards have found only one small clump of Italian arum. They state that they will take "care to remove the tubers or taproot completely. They will be disposed of in plastic bags in the trash." In addition, they will be advised to remove and dispose of the flowers in August while wearing protective clothing. (see page 8)

<u>Concern</u> – Removal method for Norway maple.

<u>Solution</u> – The stewards cite the U.S. Forest Service method to girdle medium-to-large Norway maples in spring. Girdling is one of the most effective treatments besides sawing/ cutting with herbicidal application.<sup>3</sup> The Norway maple infestation is substantial and should be addressed, by either method. Coordination with the City of Shoreline and KCD is necessary to determine available resources of contractors capable of applying herbicide versus willing stewards to girdle the invasive trees. (see page 8)

<u>Concern</u> – Timeline May 2018 to April 2019 has no action items.

<u>Solution</u> – The steward timeline was adjusted as follows: (see page 17)

(South) Tw	in Po	nds F	Park I	Resto	oratio	n St	ewar	dship	Time	eline		
			2	017 -	2018	3						
Year One	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Planning/ Proposal	•	•										
Schedule Work Parties	•	•	•	•	•	•	•					
Invasive Removal		•	•	•	•	•	•	•	•	•	•	•
Planting / Mulching					•	•	•	•	(●)*	(●)*		
Progress Documentation			•	•	•	•	•	•	•	•	•	•
Monitoring / Evaluation				•	•	•	•	•	•	•	•	•
Sign Installation					•							
			2	018 -	2019	)						
Year Two	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Schedule Work Parties	•	•	•	•	•	•	•					
Invasive Removal		•	•	•	•	•	•	•	•	•	•	•
Planting/ Removal					•	•	•	•	(●)*	(●)*		
Progress Documentation	•	•	•	•	•	•	•	•	•	•	•	•
Monitoring/ Evaluation	•	•	•	•	•	•	•	•	•	•	•	•
2019 c												
Year Three	May	Jun	Jul	Aug								
Invasive Removal	•	•	•	•								
Monitoring/ Evaluation	•	•	•	•								
Progress Documentation	•	•	•	•								

<sup>\*</sup>Recommend live stake harvest and installation in January and February.

# <u>References</u>

- 1. Kim, K. D., Ewing, K. & Giblin, D. E. Controlling Phalaris arundinacea (reed canarygrass) with live willow stakes: A density-dependent response. *Ecol. Eng.* **27**, 219–227 (2006).
- 2. Chalker-Scott, L. Viewpoint Impact of Mulches on Landscape Plants and the Environment A Review 1. *J. Environ. Hortic.* **25,** 239–249 (2007).
- 3. Munger, G. T. Fire Effects Information System. *U.S. Department of Agriculture (USDA), Forest Service* (2003). at
  - <a href="https://www.fs.fed.us/database/feis/plants/tree/acepla/all.html">https://www.fs.fed.us/database/feis/plants/tree/acepla/all.html</a>