

## Wetland Restoration Project Options – For VanAqua Feb 14, 2012

### Two ‘classes’ of options:

1. Habitat prioritized by Oregon Spotted Frog Recovery Team as restoration / introduction project. Federal land in eastern Fraser Valley. High priority for OSF. Uncertain permissions (Federal Ministerial Approval). No public visibility. Earliest restoration date: Aug 2013, more likely Aug 2014. Improvements focused on invasive plant removal and creation of OSF breeding habitat in otherwise suitable wetland. See Option 1.
  
2. Habitat within current bullfrog range; test bullfrog mitigation through habitat manipulation. Metro Vancouver Regional Park Eastern District. Lower priority for OSF. Permissions likely (Metro Vancouver Parks Manager Approval, subject to Park Management Plan currently under development). Public access. Earliest restoration date: July 2013. Significant improvements for multiple species-at-risk. See Option 2.

### Budget breakdown will be approximately:

- 50% Machine time – excavator / bulldozer
- 25% Materials – culverts, fencing, plants
- 25% Labour – Biologist site assessment, planning, permitting, site preparation, pre-work salvage, machine direction and supervision, reporting + field assistance.

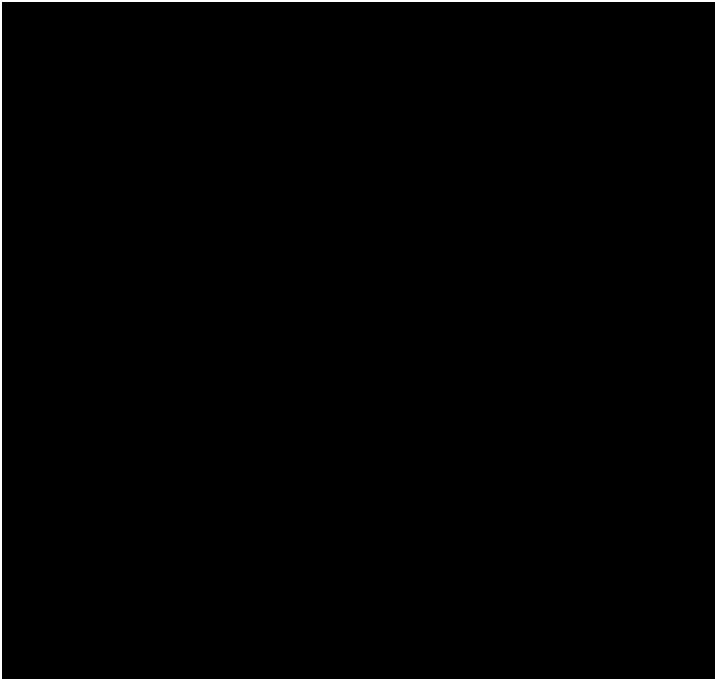
### Timeline

Timeline	Task	Comments
2012	Build partnership with land managers; acquire permissions	Identify a Champion within land manager’s organization to guide internal processes
2012	Initial habitat surveys; pre-construction habitat assessment; broad-level proposal development.	Potentially concurrent with permission acquisition.
Spring 2013	Topographic survey; detailed plan development; permit applications prepared and submitted.	
Summer 2013	Site preparation; amphibian and small mammal salvage; construction; post-construction site management (erosion control / fencing)	
Fall 2013	Riparian and herb planting	Partner with local eNGO to attract volunteer labor.
2014/15	Project maintenance – assess regrowth of invasive species and manage as required.	

Option



Map



Objective

Remove invasive reed-canary grass from drained agricultural fields and create shallow pond wetlands, focusing on OSF breeding habitat provision.

Background

Farm 2 exists within a watershed known to contain Oregon spotted frogs, and may currently provide habitat for the species. Extensive surveys for the frog will take place in this wetland in Spring 2012. The south end of an existing wetland has been drained and manipulated by humans, and contains several Ha of old field dominated by invasive reed-canary grass.

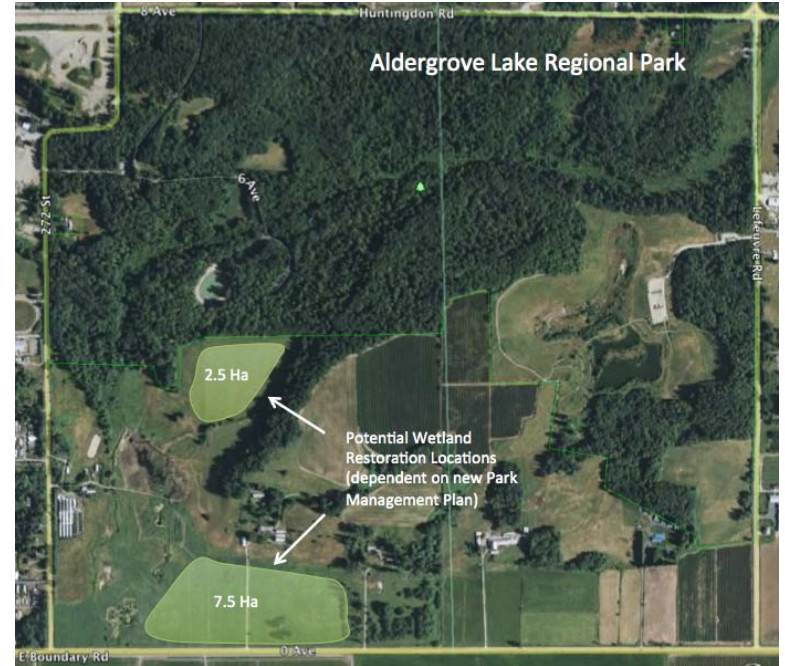
Considerations

[Redacted] approval is required for habitat restoration and potential introduction of the Oregon spotted frog.

Amphibian conservation Implications

Prioritized Oregon spotted frog restoration / introduction habitat. Is currently identified as Survival Habitat for Oregon spotted frog in Provincial OSF Recovery Strategy.

2. Aldergrove Lake Regional Park Amphibian Ponds



Recreate shallow water permanent wetlands in drained agricultural fields for reintroduction of the endangered Oregon spotted frog into historically occupied drainages.

Aldergrove Lake Regional Park managed by the Metro Vancouver Parks department. Proposed restoration sites are historic agricultural fields within the Park boundaries, and are directly adjacent to recent restoration works for endangered fish species the Salish sucker and the Nooksak Dace. Multi-species project focused on federally listed endangered species.

Metro Vancouver Parks is currently undergoing a Management Plan update for ALRP, which will propose wetland creation for amphibian habitat provision.

Not currently prioritized as OSF introduction habitat, due to bullfrog presence. Test incorporation of anti-bullfrog habitat manipulations in restored permanent pond habitat.