Sifton Bog – Terms of Reference 2015: Comments and Recommendations

Prepared by EEPAC working group: Alfredo Martinez-Iglesias,

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General

- We question the use of "conserve and enhance" in the draft terms of reference purpose section. This plan does not conserve or enhance, but measures and monitors for future conservation and potential enhancement.
- Scope of work is missing specificity (i.e. does bog refer to ESA in its entirety or Redman s Pond or swamp other).

Monitoring Locations

Sifton Bog MP Monitoring Point Locations (Map)

- Why are there no monitoring locations on the southeast, south central, and south west sides of the ESA? Why are there no vegetative locations on the west side of Redman's Pond? Why is there no monitoring locations along the trails (either managed or unmanaged)? If no vegetation monitoring is performed near the southern trails, how will the impact/disturbance of these trails be measured? If a disturbance process to the bog includes overabundance of white-tailed Deer, why is the vegetation in and around deer sighting locations not monitored?
- Why are monitoring locations 3 and 4 so close together? Is there benefit in moving one
 of these to gain a better spatial variation?
- You appear to have a north south transect, but no east west transect? Changing patterns on a spatial scale is extremely important.

Sifton Bog 1992 Vegetation (Map)

 Most monitoring locations appear to occur in region 3 (Bog), with a few in 4a, 4c, and 4f. Why are there none in other regions (e.g. region 4d (Swamp), or even regions 5, or 6). Is the monitoring of the vegetation status strictly limited to areas of "Bog" classification, rather than swamp and surrounding areas? i.e monitor for change in percentage of Rhamnus frangula in the low lying wetlands?

<u>Other</u>

- Potentially add a survey of areas not included in the current monitoring locations for the vegetation inventory to identify additional locations that would benefit from the installation of a permanent 10x10 plot. This could be due to the increase of invasive species, or due to the found presence of an endangered plant species at that location; this would enhance the scope of work in the draft terms of reference: 8) *Provide updated ELC Figures and locations of rare or endangered species*.
- According to Recommendation 1.5.3 (p.94, Master Plan), "spread and density of the Common Cattail and Three-way Sedge should be done in Redmond's Pond, ditches, and in deer trails in the shrub and treed bog communities." This is more than just the "Bog" as referred to in Scope of work item 5 in draft terms of reference.

Monitoring Events

- Does the scope of work proposed help meet the goal/objective of "conserving and enhancing" the ecological health of the site? (These objectives appear to require some kind of intervention more than simple monitoring – is this possible?)
- There are four years left to the project (2009-2019) are the parameters you are proposing to study new or can they be compared to past data? If so, then assume they will be tracked for the following 4 years until the completion of the project; is this sufficient time to provide meaningful information? (Assuming data acquisition will stop after 4 years)

Comment [JE1]: I concur. However, because the objective is long-term, we may want to leave things as they are.

Comment [JE2]: My impression is we leave things as they are: the scope is accurately covered within the "Purpose" of study, which could as well be the "Scope of work". Section 2.0 is basically the "Objectives" section and not necessarily the scope of work.

Comment [JE3]: Legitimate concern if resources are not limiting: However, for monitoring purposes, we may not have all representative sampling plots. I believe, "monitoring" sets the stage at which we can start to see trends before deciding to put in place specific study(ies) to narrow down onto specific causes of trends. If that is the case, the design is a good start.

Comment [JE4]: Same observation as above.

Comment [JE5]: Legitimate concern. Nevertheless, I think the "objectives" contribute to the overall mandate, "Purpose" of this monitoring framework.

Comment [JE6]: I concur. However, data gained can provide other clues that may require proper design of our monitoring protocols.

Hydrological Monitoring with Vegetative Monitoring

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- According to Recommendation 1.5.2 in the Sifton Bog ESA Conservation Plan, the monitoring of aquatic plants in Redmond's pond should be done annually in response to changes in water level response or goldfish populations.
- Is the hydrological work being conducted used to interpret and complement vegetation monitoring? It may <u>be</u> a good idea for the vegetative report and the hydrological reports be written concurrently as it seems like the vegetative results could be highly dependent on the results of the hydrological report. (Example: are contaminants from runoff (oil, salt, other) affecting bog biodiversity? Are the following water quality parameters being monitored: Nutrient levels, pH, salts etc? Are water levels impacting biodiversity?)
- Will the results of the hydrological monitoring be a factor in when the planned work is scheduled to take place?
- Since the Sifton Bog ESA Master plan indicates that these measures be taken only once every year or even once every 3 to 5 years, why are we doing this 3x in one year? Will the entire Vegetation Plots and Plants of Concern be done three times a year for every year? Or is this only this year? Does the budget permit this? We understand that different plant species will be present at different times, however could the work be subdivided based on seasonal species presence?

Comment [JE7]: Seems reasonable if the objective is to have a quick assessment using unsophisticated parameters. That is, to determine trends.

Comment [JE8]: Reasonable question. However, this is the logical step of investigation after trends are evident from monitoring protocols.

Comment [JE9]: I think the purpose is to inventory vegetation composition. I would also imagine the purpose is to start predicting whether changes are taking place before investigating various interplays of ecological factors. If that is the case, then the monitoring method suffices.

Comment [JE10]: I think it is important to have these snap shot measures taken 3X a year if budget permits for purposes of having a clear annual picture of vegetation in the bog