

# SERNBC Ecosystem Restoration Project Selection Process Development Workshop

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Project 1230-3

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## Introduction

Forsite was asked by the Society for Ecosystem Restoration North Central BC (SERNBC) to plan and facilitate a workshop for the purposes of developing an ecosystem-based strategic approach to selecting ecosystem restoration (ER) projects. The workshop was to build upon and be consistent with the SERNBC Strategic Plan completed in 2014. <http://www.sernbc.ca/pdf/SERNbcStrategicPlan.pdf>

The workshop was held on March 8<sup>th</sup>, 2016 in Prince George. Participants from Government, UNBC, and consultants attended in person and by speakerphone. John DeGagne began the workshop with a presentation of SERNBC structure, mission, goals, priorities and then a detailed description of past projects to familiarize attendees with SERNBC's function. The workshop was intentionally not rigidly structured after the introductions to let the assembled expertise brainstorm and discuss the issue freely.

Contributions were extensive from all participants and resulted in a proposed ER project selection framework being proposed, of a rather unexpected form. Rather than a process based on known BEC units, ecosystems and associate data following a flowchart-type process as was somewhat expected, it was suggested to use recent large wildfires as a basis for locating multiple SERNBC ER projects. Selecting potential projects from within wildfire areas has a number of procedural and logistical benefits, could enable SERNBC projects to be more effective on a landscape and regional level, and may position SERNBC in line for some recently announced provincial forest investment funding.

## Project Objectives and Scope

The workshop was intended to:

- Bring together ecologists, ecosystem restoration practitioners and wildlife habitat specialists,
- Allow the assembled experts to freely engage in discussion bounded only by SERNBC's objectives and mission to see what arises,
- Learn about ER projects, priorities and project selection methodology elsewhere in the Province,
- Learn of new and emerging ER situations relevant to the Omineca Region and elsewhere that may affect SERNBC in the future, and
- Consider all potential approaches to enable SERNBC to identify a process to select optimal ER projects.

## Methods

Considerable time was spent investigating the "who's who" of ER and ecology in the Province and Omineca Region in order to develop an invitation list. It was desirable to have academic government and independent consultant representation for their differing perspectives.

It was a goal from the onset to assemble a very knowledgeable group, small enough in size to allow all participants to fully engage and exchange ideas and views. It was also a goal in ensure that some of the attendees would have recent expertise in Omineca Region climate change ecological implications. A description of the proposed workshop goals and objectives was developed and sent to invitees.

The invitation was received with enthusiasm from all recipients, however, not all could attend. The ability to participate by phone enabled several to join the group who otherwise would not have been able to.

The workshop was an all-day event held at a government building in Prince George.

## Results

The March 8<sup>th</sup> workshop produced some surprising results. An ER project selection process was outlined although it was not at all what was imagined beforehand. The proposed “process” actually is a shortcut to much of the process that was anticipated, and “gets right to it” and has amazing potential for SERNBC.

**The proposed strategy for selecting ER projects for SERNBC is to:**

***Consider the area burned in recent large wildfires and select from the mosaic of burned sites those that may be augmented, treated, seeded, planted or nudged in their natural development trajectory to become the types of ecosystems that SERNBC has identified through strategic planning as being of importance and requiring restoration.***

- 1) Identify a recent large fire area that includes the BEC units (SBS dk dw3 (Fd, aspen and grass) to SBS mc2) required for SERNBC’s 4 target ecosystems
- 2) Identify sites within the burn area that could be regenerated, nudged, augmented or enhanced to become one of the types of ecosystems SERNBC wants to promote in the BEC units. Also consider some of the “rare and required/desired” ecosystems as listed by Craig Delong in workshop to be developed in the burn area. Consider future CC conditions for suitability of the ecosystems on the particular burned site.
- 3) Approach ministry to get permission to develop a prescription for the area to guide activities within the area. This should be done ASAP after the fire before any range seeding, reforestation plans, salvage plans are made. Who to approach is still to be determined.
- 4) Create zonation within the burn perimeter to identify areas that should be retained from salvage, areas to treat as regular THLB, and other areas requiring special treatments to attain SRNBC goals. SERNBC may wish to address rehab of firebreaks, fire access roads and other road and infrastructure sites from fire use or otherwise at this time as well. Mapping could be done via GIS using inventory of previous stands, ortho and GIS-based images, site series and photos taken by the wildfire service during their operations. Zonation mapping could be done into VRI layer by editing polygons.
- 5) Provide Ministry (whomever this may end up being) with initial zonation in shapefile format showing areas in which SERNBC will take on as project areas, and other areas in which salvaging, regular reforestation seeding etc. can take place. Now the project area is “secured”.
- 6) Develop full site prescriptions for establishing required vegetation or for undertaking works to develop desired ecosystems on selected sites. Fully document expected benefits and develop a complete ecological biodiversity rationale.
- 7) Obtain approval from (to be determined) ministry for site prescriptions.
- 8) Undertake works - plant, seed, augment, map and do on site works. Establish permanent sample plot system to track progress growth and usage. Establish system of indicators to track progress/success.
- 9) Develop and submit full site label in VRI database format to Ministry inventory branch. System similar to RESULTS ?
- 10) Schedule periodic surveys and monitoring to document progress of ecosystems along desired seral/developmental paths and sign of wildlife biodiversity usage or other indicators of success.

A wildfire –based ER project selection system approach is a good fit for SERNBC. Using wildfires as the Starting point for developing SERNBC projects has many benefits and advantages over the current approach:

- 1) Using fire for attaining ER goals is tricky and is expensive, not just the operational costs but in terms of SERNBC's effort, and limited capacity to do projects
- 2) Fire can get away and do damage, potential for additional costs and for making SERNBC unpopular to people who might otherwise be supporters.
- 3) Burning has to wait for the right ventilation index, whole seasons can be missed.
- 4) ER fires are mainly in the spring, which is not ecologically normal. Un-intended damage may be incurred?
- 5) Large wildfire areas are very likely to include all of the types of sites SERNBC wants to enhance.
- 6) Large wildfires, and the administrative void created concerning management obligations, opens the doors to areas for SERNBC that would otherwise not be available. Nobody wants to deal with the area.
- 7) Large burn areas could present huge areas for projects far beyond the small stand-level projects that have been possible to date. This enables SERN to develop significant areas of the desired ecosystems across the landscape and at a scale required for accomplishing real landscape level ecosystem balance.
- 8) Large wildfire areas give the potential to design not just single ecosystem sites, but entire ecosystem complexes, with opportunities to design enduring connectivity.

Various branches of MOFLNRO are likely to be very supportive of SERNBC using wildfires as a base for selecting projects because:

- 1) Prescription could help develop inventory labels which are required and it is not clear who does it now.
- 2) Planting deciduous to meet biodiversity goals can also aid in reducing urban interface fire risk,
- 3) As Al Neal said, there's a good likelihood of fires to be very intense and sites to have low production for a long while so significant areas might not be a good THLB investment. ER is a good use for intensely burned areas converting to non-timber uses.
- 4) Kevin Kreise indicated MOFLNRO is keen on ER
- 5) The current disarray regarding what to do with a burned area and delay getting it back into inventory could mean SERNBC would be welcomed into this area.
- 6) ER is an excellent opportunity for 1st Nations involvement right from the first through all stages of a project. Especially at start defining projects to suit their traditional values and vision for future conditions
- 7) This is a very public friendly, politically good type of project.
- 8) MFLNRO knows SERNBC and has a good track record/relationship.

SERNBC using wildfires as project locations creates good potential for obtaining FEP funding (such as FEP \$85 million) because:

- 1) Projects could be ready to implement quickly to get funding that becomes available.
- 2) Very little admin and prep costs.
- 3) Good First nations Involvement potential
- 4) Huge group of ecologists behind the project from government, university, industry.
- 5) Many levels of ministry approve of it, Fire Management Branch likely would

The wildfire-based approach has potential to affect much more area in the region than SERNBC currently is able to because of the existing necessity of having to avoid areas under other management regimes, tenure obligations, or which would just not be logistically feasible to rehabilitate. The amount of area that SERNBC could convert to biodiversity priority ecosystems would be many times otherwise possible. That together with the fact that because of the apparent void in post-burn management, SERNBC may get a much larger budget to partially fulfill the management and inventory role. This could become a very significant and large role.

Other SERNBC approaches and project selections are still 100% possible. There is no reason why not. If the wildfire-based approach was adopted, SERNBC would have this strategic approach to secure funding and deliver majority of mission, as well as retaining the ability to let key directors and funding partners do projects directly related to their interest areas and continue to try new things as well.

Once the wildfire-based process is solidified and a few projects have been completed, this could turn into a very efficient process. This process could be well recognized and may become the norm for how the rehabilitation of large wildfires is approached.

A mock-up of a recent fire could easily be completed to show to Ministry branches what a SERNBC project would look like and compare it to what is done under current system or apparent lack of system. The use of the red dog fire area for such an example may be excellent, as it could show an alternative to intensive salvage. It could illustrate a “what might have been” example. Other large fires with the right BEC units would also be good examples.