

SERNbc Strategic Intent - 2013

Draft Report

October 30, 2013

Society for Ecosystem Restoration in
North Central BC
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sern
Society for Ecological Restoration
in North Central British Columbia

SERNbc recognizes the Habitat Conservation Trust Foundation and anglers, hunters, trappers and guides who contribute to the Trust, for making a significant financial contribution to support the development of the Strategic Plan. Without such support, this project would not have been possible.



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Executive Summary

A grass-roots effort to complete ecosystem restoration (ER) work within BC's Vanderhoof Resource District was started in 2006. In support of expanding ER to the rest of the Omineca Region, the Society for Ecosystem Restoration in North-central BC (SERNbc) was established in January, 2013. A strategic planning process was initiated in July of 2013 to provide guidance to the society overall, and in support of funding applications. The preliminary results of this strategic planning process are documented in this report.

Forest and land management, development and climate change will impact ecosystem structure and function. In many cases, effects are relatively short in duration, while other influences, individually or in concert, have more lasting effects. Where the impacts result in ecosystems that are not able to cope or respond effectively to the disturbances, these ecosystems are vulnerable and could become degraded. Key to the continuing presence of healthy ecosystems is our ability to understand when ecosystems are vulnerable and to alter our management approach to foster resilience; key to ecosystem restoration is our ability to identify degraded ecosystems and implement activities that will restore these ecosystems and their ability to continue to provide ecological and socio-economic products and services.

The mission of the Society for Ecosystem Restoration in North Central BC is to manage the structure and function of vulnerable and degraded ecosystems in the Omineca Region to achieve a desired future condition that will sustain ecological services and human socio-economic needs.

The purpose of the society is to:

- Identify, treat, and monitor vulnerable and degraded ecosystems in the Omineca Region to achieve a desired future condition that will sustain ecological services and human socio-economic needs.
- Coordinate ecosystem restoration activities in the Omineca Region and foster collaboration amongst stakeholders.
- Acquire technical information on ecosystem restoration and disseminate it to members and stakeholders.
- Inform public and land managers on current ecological vulnerabilities as understood through the implementation of ecosystem restoration

SERNbc will focus on the restoration of vulnerable and degraded ecosystems. A broad range of potential ecosystems could meet this definition. Priority Ecosystem Types that represent specific focus for SERNbc in the coming years include:

- **Open Forests** – generally impacted by the exclusion of fire as a disturbance factor
- **Species and Ecosystems at Risk** – that may benefit from restoration treatments
- **Aquatic Ecosystems** – including wetlands and fish barriers/fish passage
- **Berry Producing Areas** – with specific attention to both wildlife and First Nations interests
- **Forest Adaptation** – supporting assisted migration of tree species in response to impacts of climate changes

Ecosystem restoration projects will be identified, shortlisted and prioritized based on a structured framework to ensure that investments are made in priority areas that represent the best fit with SERNbc objectives.

SERNbc will define values, objectives, indicators and thresholds for ER projects to support an effective understanding of the objectives of a given treatment and the monitoring of how well these objectives are being met.

As vision for the next 5 years, SERNbc will:

- Support the implementation of ecosystem restoration activities throughout the Omineca Region, with projects in each of the Resource Districts (Prince George, Mackenzie, Ft St James and Vanderhoof).
- Implement enough projects to create economies of scale to sustain a full time coordinator
- Intentionally partner with First Nations, governments and NGOs to secure funds and plan and implement ecosystem restoration.
- Provide value to agencies and other stakeholders in coordinating ecosystem restoration activities so as to reduce overlap, improve efficacy, and ensure ecosystems in greatest need have the highest priority.
- Be a respected contributor to forest and land management in the Region, providing information to government and NGOs regarding ecosystem vulnerability and management.

In support of this vision, SERNbc will specifically address the key areas of governance and administration, partnerships, landscape level planning and a project development process in order to effectively increase the implementation of ecosystem restoration across the Omineca.

Acknowledgements

The SERNbc Strategic Intent is the results of a broad engagement with and input from SERNbc members and interested stakeholders throughout the Omineca Region and beyond. The report was developed by Randy Spyksma, MSc, RPF (Forsite Consultants Ltd) with significant support and contributions from John DeGagne, RPF (BC Ministry of Forests, Lands and Natural Resource Operations) and Larry McCulloch, RPF (LM Forest Resource Solutions Ltd.).

SERNbc recognizes the Habitat Conservation Trust Foundation and anglers, hunters, trappers and guides who contribute to the Trust, for making a significant financial contribution to support the development of the Strategic Plan. Without such support, this project would not have been possible.

We would also like to acknowledge funding contributions from the Ministry of Forests Lands and Natural Resource Operations Ecosystem Restoration Program and the B.C. Cattleman's Association to the overall work of the society, in combination with in-kind support provided by many other government and non-government organizations.

SERNbc would also like to thank the many individuals who have contributed to the strategic planning discussion through the website, questionnaire and phone and in person conversations. We look forward to continuing to work with and support each contributor in the implementation of ecosystem restoration across the region.

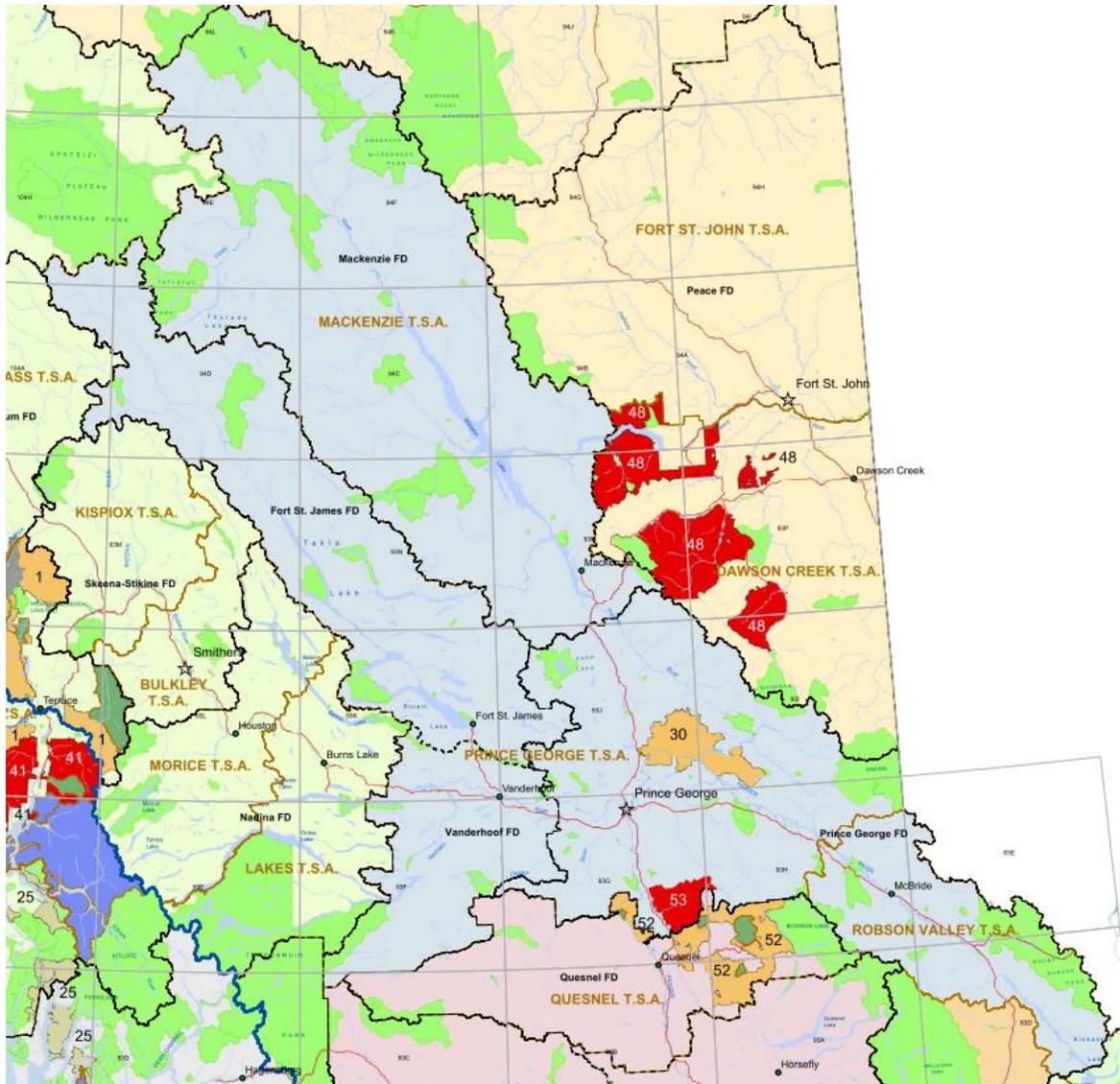
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1 Introduction

A grass-roots effort to complete ecosystem restoration (ER) work within BC’s Vanderhoof Resource District was started in 2006. In support of expanding ER to the rest of the Omineca Region (Figure 1), the Society for Ecosystem Restoration in North Central BC (SERNbc) was established in January, 2013. A strategic planning process was initiated in July of 2013 to provide guidance to the society overall, and in support of funding applications. The preliminary results of this strategic planning process are documented in this report.

Figure 1 Omineca Region (in blue). Geographic extent of SERNbc.¹



The *Strategic Intent* represents the results of a broad and detailed stakeholder-based engagement process that was combined with a strategic level planning workshop on on-going discussions with the board of directors. The *Strategic Intent* document represents the SERNbc board-approved strategic direction for the society for the next 5 years.

¹ Taken from the British Columbia Provincial Management Unit Map. October 2011. Ministry of Forests, Lands and Natural Resource Operations.

2 Context

Forest and land management and development activities have been ongoing in the Omineca for over 100 years. In addition, and more recently, climate influences on ecosystems are changing. Recent or imminent management and development pressures within the Omineca Region include an increased harvest of MPB impacted stands throughout the region as well as an increase in the potential development of linear utility corridors (i.e. transmission lines and pipelines) crossing the region.

These changes have and will have variable effects on ecosystem structure and function. In many cases, effects are relatively short in duration, while other influences, individually or in concert, have more lasting effects. Where the impacts result in ecosystems that are not able to cope or respond effectively to the disturbances, these ecosystems are vulnerable and could become degraded. Key to the continuing presence of healthy ecosystems is our ability to understand when ecosystems are vulnerable and to alter our management approach to foster resilience; key to ecosystem restoration is our ability to identify degraded ecosystems and implement activities that will restore these ecosystems and their ability over time to provide ecological and socio-economic products and services.

SERNbc facilitates the understanding of vulnerable and degraded ecosystems and coordinates, enables or implements ecosystem restoration activities throughout the region. Through this activity an improved understanding of current ecosystem vulnerability will develop and information can be shared with stakeholders and government in our mutual effort to foster sustainable management of the land and its resources.

3 Mission and Purpose

The mission of the Society for Ecosystem Restoration in North Central BC is to manage the structure and function of vulnerable and degraded ecosystems in the Omineca Region to achieve a desired future condition that will sustain ecological services and human socio-economic needs.

The purpose of the society is to:

1. Identify, treat, and monitor vulnerable and degraded ecosystems in the Omineca Region to achieve a desired future condition that will sustain ecological services and human socio-economic needs.
2. Coordinate ecosystem restoration activities in the Omineca Region and foster collaboration amongst stakeholders.
3. Acquire technical information on ecosystem restoration and disseminate it to members and stakeholders.
4. Inform public and land managers on current ecological vulnerabilities as understood through the implementation of ecosystem restoration²

² SERNbc does not have an advocacy role beyond that which is outlined here. The role of advocating for change in land and resource management legislation, policy and management is not a role that SERNbc has identified. Membership in the society and on the board of directors includes individuals that are also involved in provincial level associations (Cattleman, Guide Outfitters, Trappers, Wildlife Federation, etc.), groups where this advocacy role is better suited. SERNbc will strive to provide information to government and NGOs to foster an improved understanding of ecosystem dynamics and vulnerabilities across the region.

4 Operational Factors

The following principles or factors will provide guidance to SERNbc in the planning and implementation of ER in the Omineca. These principles also provide clarity on the types of activities and approaches that will be used by SERNbc in the implementation of its mission.

- **Incremental Activities** – SERNbc will not generally get involved where activities are a current obligation or license requirement. Where SERNbc is approached with funds, to partner in these situations, involvement will be considered based on consistency with the society mission, purpose and protocols.
- **Additional Activities** – SERNbc is looking to expand ecosystem restoration activities across the Region. Where programs are already in place that adequately address a certain vulnerable or degraded ecosystem, SERNbc will not likely get involved, or will look for ways to augment or support the current initiative
- **Land Status** – Generally, SERNbc will be operating on crown land where multiple values are recognized and entrenched in legislation and policy. Where non-crown proponents approach SERNbc, involvement will be based on alignment with the SERNbc mission, purpose and protocols as well as the longevity of the ecological benefit that is anticipated. Covenants can be used on private land, for example, to help ensure the longevity of restoration efforts.
- **Partnerships** – SERNbc will look to partner with government, NGOs, academia and private or individual proponents in the implementation of ER in the Omineca.
- **External Funding** – In general, SERNbc will apply for and use external funding to implement ecosystem restoration activities. A diversity of funding sources will be used to implement a wide range of ecosystem restoration activities. Opportunities for revenue generation within a project (i.e. removal of merchantable timber through a thinning treatment) will be used where possible to offset project specific costs.
- **Landscape Driven Priorities** – activities will be supported by a regional or landscape level understanding of ecological conditions and resulting identification of priority areas for treatment.
- **Authority for Restoration** – authority to undertake restoration activities is effectively through stakeholder agreement, however, legal authority to implement activities must be given by the landowner/manager (in most cases, the provincial government).
- **Ecosystems vs Species** – SERNbc will generally focus on restoration of ecological processes and areas of multiple values rather than on individual species or where a single special interest benefits.
- **Tension Between Values** – SERNbc recognizes the need to consider and balance ecological, social and economic values when considering involvement in restoration activities. These values may or may not be in conflict. SERNbc will engage in a collaborative stakeholder-focused environment to ensure benefits to multiple values.

5 Key Definitions

The following key definitions are provided to further explain the mission, purpose and principles of SERNbc, and promote a common understanding of the activities of the society:

- **Ecosystem Restoration (ER)** is the management of the structure and function of vulnerable and/or degraded ecosystems to achieve a desired future condition that will sustain ecological services and human socio-economic needs.
- **Vulnerable ecosystems** are those that are less likely to cope with, resist and/or recover from disturbance. The vulnerability extends to the ecological or socio-economic values associated with that ecosystem. The vulnerability of an ecosystem could be influenced by management practices, natural processes and/or climate change.
- **Degraded ecosystems** are those that have been impacted to the degree that they no longer provide and are not likely to provide ecological or socio-economic values inherently associated with that ecosystem or associated ecological processes.
- **Desired future condition** generally refers to a target set of structural and functional attributes necessary to maintain ecosystem function and provide the ecological services and “products” considered to be important by stakeholders. A desired future condition must incorporate an understanding of ecological systems, climate change, and forest management, and have a specific time scale in mind. *Desired future condition* should also incorporate the concept of resilience or the ability of self-renewal, where an ecosystem is able to incorporate change and yet still deliver desired attributes or values.
- **Resilience** – Capacity of an ecosystem to respond to disturbance and recover quickly. The ability of self-renewal. It is important to note that ‘resilience’ as used here, does not allude to the ability to return to the same state, but the ability to respond to change or stressors and yet still exhibit desired attributes and provide desired values.
- **Climate Change** - Given the high potential for climate-induced change to ecosystems it may be inappropriate for land managers to attempt to restore ecosystems to a pre-existing state. Management practices should be based on fundamental ecological principles and expected future conditions, to create new conditions that provide reasonable assurance of resource availability and ecosystem function and the ability of the ecosystems to provide services, now and in the future.
- **Values or Benefits** – Ecosystem restoration is carried out to ensure that ecosystems can provide services that are deemed important to stakeholders. These values or benefits may be ecological (i.e. longevity of a species at risk or increased forage for wildlife) or socio-economic (i.e. cattle forage production or maintenance of hunting opportunities).

6 Priority Ecosystem Types

SERNbc will focus on the restoration of vulnerable and degraded ecosystems. A broad range of potential ecosystems could meet this definition. Priority ecosystems would be the types or categories of ecosystems that will be a priority for SERNbc. Individual sites and how these are identified and prioritized is a separate and more detailed and operational process discussed further in Section 7.

Factors considered in the development of a list of priority ecosystem categories include the following factors:

- SERNbc experience and expertise with an ecosystem type and/or associated treatment regime
- Ecosystem types and associated restoration activities that result in products and services that meet a wide range of values, interests or stakeholder needs
- Lack of current and significant programs or activity to address a specific vulnerable or degraded ecosystem type

In order to provide further focus to the society and to the implementation of this mission, a more focused list of what will be considered priority ecosystems is of value. Priority ecosystems that will be the focus of planning and implementation for SERNbc in the coming 1-5 years have been identified by SERNbc:

6.1 Open Forests

- Open forest conditions that are generally being impacted by or changing due to change in disturbance regime (including land management activities). This category includes the transition from grassland/brushland ecosystems to open forest conditions. Fire was at one time the most common type of disturbance in these areas.
- Wildlife, range and traditional use (First Nations) values common in these ecosystems. Other site specific values may also be present.

6.2 Species and Ecosystems at Risk

- Red-listed (endangered or threatened) or blue-listed (of special concern or vulnerable) species or ecosystems
- Restoration activities to be focused on restoration of ecosystem structure and function that will support the long-term viability of these species and ecosystems.
- Values are associated with the long-term persistence of wildlife and plant species and ecological communities that are considered at risk. Other site specific values may also be present.

6.3 Aquatic Ecosystems

- A range of aquatic ecosystems would be considered as potential candidates for ecosystem restoration. Specific priority will be given at this time to;
 - **Wetlands** – Wetland restoration can be used to address a range of wetland impacts, such as hydrology/water levels and vegetative structure and composition.
 - **Fish Passage** - Significant gains in available fish habitat made by restoring fish passage where it has been blocked by development (generally by culverts associated by roads or rail).³
 - Many aquatic ecosystems should be managed at a watershed level, through coordinated planning and management strategies. This requires coordinated planning that generally involves the provincial government, potentially the federal government, and land and resource licensees and such planning is generally beyond the scope of SERNbc.

³ Fish passage restoration, where implemented in an appropriate location, is a relatively cost effective means to improve fish habitat, when compared to stream channel construction or restoration activities. Administrative challenges associated with road status, licensee responsibilities and access management considerations make many of these projects extremely complex. The more challenging these issues, the more planning is required. SERNbc will have to ensure that clear conditions exist that point to an effective fish passage solution prior to engaging in these projects.

- Values associated with this ecosystem category could be directly related to water itself (i.e. water quality) as well as processes directly linked to water (i.e. longevity of fish species, fish production, sustainability of watering source).
- It is important to note and aquatic ecosystems should not be treated without considering related upland or terrestrial ecosystem processes and conditions.

6.4 Berry Producing Areas

- Brush/berry producing areas that are generally being influenced or impacted by changing disturbance regimes. Lack of current and imminent berry producing areas may also be influenced by current and longer-term expected seral stage conditions across the landscape.
- Values are for wildlife as well as First Nations traditional use and public use. Other site specific values may also be present.

6.5 Forest Adaptation

- Forest Adaptation is not a specific ecosystem type, but relates to an ecological process that is focused around the adaptation of our forests to climate change.
- An example would be the assisted migration of Douglas-fir or Western Larch into areas that have traditionally not had these species larch present, but where it will likely perform well given the expected impacts of climate change.
- Assisted migration or other forest adaptation strategies are not a typical response to ecosystem vulnerability as is discussed above, but are strategies to help respond to and reduce ecosystem vulnerability over the long-term.

It is important to note that although the ecosystem types outlined above are the focus for SERNbc in the next 5 years, additional opportunities will also be considered where they align with mission, purpose and protocols of SERNbc.

7 Prioritization of ER Projects

It is expected that the need for ecosystem restoration will exceed available funds. Given this, a process is needed that will allow SERNbc to make clear, consistent and transparent decisions about what ecosystems restoration projects or sites are identified as priority. A two-tiered approach will be implemented that first involves a preliminary screening process to shortlist projects, followed by the prioritization of resulting projects.

7.1 Preliminary Screen⁴

The following factors will be considered in completing a preliminary screen of projects being considered by SERNbc as well as those that are presented by other proponents to SERNbc for support, endorsement or involvement.

- **Does the project involve vulnerable or degraded ecosystems?** (Additional questions can also be used to confirm).
 - **What makes the ecosystem vulnerable or degraded? What ecosystem process or structural feature is missing, damaged, or degraded?**
 - **Will the vulnerability change over time without intervention? How long will this take?**
 - **If vulnerable, what resource values are at risk? What is the likelihood of impact?**
- **Is someone else obligated to undertake the treatment?** (Ensure it is incremental. If not, additional strategies would need to be employed).
- **Is there currently an effective program in place to address this need?** (Ensure it is additional or complimentary).
- **Would treatment be carried out on crown land?** (Ensure benefits will persist. If not, additional strategies would need to be employed).
- **Will development or industrial activity impact the longevity of the benefit?** (To avoid treatments where industrial activities may interfere with project objectives).
- **Who or what will benefit from the restoration?** (Understand values and focus on projects that provide multiple benefits).
- **Is funding in place or likely?**
- **Are the objectives or benefits of the project understood?** (Clear goal and outcomes for the project. May not be detailed at this stage of planning, but should be clear and logical.).
- **What district is the work proposed in?** (SERNbc is interested in completing works across the region, including specifically in each of the Prince George, Mackenzie, Ft St James and Vanderhoof Districts).

Projects that may not make it past the preliminary screening step may be considered in the future if unresolved issues are addressed or as priorities change.

⁴ It is important to note that preliminary screening may not generate a simple yes/no answer, but may be used to guide decision makers in the selection of sites that require further consideration.

7.2 Prioritization Criteria

A multi-criteria approach to project prioritization is outlined in Figure 2. This ranking process should be implemented by 3 or more informed individuals with knowledge of the proposed ecosystem types and treatment types.

Figure 2. Multi-criteria analysis framework used to prioritize sites for treatment.

| Criteria | Measure | Rank | | | |
|-----------------------|---|--|---|---|---|
| | | No (0) | Low (1) | Moderate (2) | High (3) |
| Multiple Values | Number of interests or values likely to benefit | Up to 1 interest/values | 2-3 specific interests/values | 4-5 specific interests/values | More than 5 interests/values |
| Rare or at Risk | Presence of species at risk or rare | ←————→ | | | Regionally and sub-regionally rare and/or at risk. |
| Longevity of benefit | How long the benefits of the treatment will last. | Less than 2 years | 2-5 years | 5-10 years | More than 10 years |
| Cost/Multiple Entries | Project cost and need for follow-up treatments. | ←————→ | | | Lower cost and only single treatment likely required. |
| Difficulty/Logistics | Complexity of the treatment and its implementation. | ←————→ | | | Known, previously completed and/or relatively simple treatment. |
| Partnerships | Involves collaboration and partnering with other organizations. | No partnerships other than funding organization. | 1-2 partners or organizations contributing. | 3-4 partners or organizations contributing. | 5 or more organizations involved, or new partnerships being formed. |

It is important to note that projects will come to SERNbc for consideration through a range of different processes, from individual projects brought forward by a certain group, to projects that are generated through landscape or regional level analysis that flag and identify priorities or projects. In either case, the above factors can be valuable tools to shortlist a project and then understand its priority when compared to others. In addition to this ranking and comparative approach, the same criteria can be used to affirm or endorse a single project that is being considered by SERNbc.

The prioritization criteria and associated values are not intended to be a specific numeric formula that generates a value that, if it is above a threshold level, the project is deemed worthy. Despite this, the criteria can be used to

- 1) Compare projects relative to one another and
- 2) Confirm that a single project generally aligns with the intent and priorities of the society.

8 Objectives and Monitoring

A key component to ensuring the success of ecosystem restoration is 1) setting of objectives and 2) monitoring to see if the objectives are being met. SERNbc will use a standard approach based on Values, Objectives, Indicators and Thresholds (VOITs) in order to design and monitor specific success of restoration treatments.

Values – ecosystem restoration is proposed in an area because there are values of importance that are at risk given vulnerability of ecosystems. Specific values of focus will be defined during the planning and prescription phases of the projects. Examples of these values could be healthy ungulate populations, sustainable fish populations or infrastructure that is safe from wildfire.

Objectives – objectives associated with the value are then defined. The objectives need to be specific and measurable in order to support meaningful measurement and conclusions on the success of treatments. Corresponding examples of objectives include tripling available winter range forage volume, accessing 3 kilometres of fish habitat or reducing fire hazards in the area to low.

Indicators – an indicator is a specific feature or metric that is going to be measured to determine if the objectives is being met and the value protected/created. In order to be effective, an indicator needs to be directly related to a value and influenced by a treatment. Examples of indicators that may correspond to the values listed above include forage volume (i.e. for wildlife), plunge pool depth (i.e. impacting fish passage) or fuel loading (i.e. contributing to fire hazard).

Thresholds – thresholds are a minimum or maximum level that the indicator should have in order to meet or fail to meet a specific objective. Not all indicators may benefit from a specific threshold. In some cases, an indicator falling within a certain range may be considered desirable. Examples of thresholds could include 2 tonnes annually of forage, 45 cm plunge pool depth and 35 tonnes/ha of fuels.

Following the definition of VOITs for each project, SERNbc will also determine;

- 1) If there is significant uncertainty in the outcomes expected from treatments or
- 2) Specific stakeholder interest in securing additional information related to the impacts of treatments on specific indicators.

Where either of these conditions apply SERNbc will implement a more structured sampling regime through a Before-After Control-Impact (BACI) style approach to monitoring. This approach provides the mechanism to further understand impacts of ecosystem restoration treatments on the identified values.

Although a formal BACI style program may not be possible in all situations (for example, because of cost constraints or based on the lack of available control sites) it is understood that effort made to establish BACI style sampling or monitoring to the greatest extent possible will provide value in and of itself, specifically in:

- Furthering an understanding of the ecological dynamics at play within and adjacent to the project area
- Improved understanding of the indicators of ecological health in the area
- Supporting adaptive management both with regards to ecosystem restoration treatments but also regarding effective monitoring regimes

SERNbc will partner with academic institutions and researchers whenever possible to support the monitoring and adaptive management of ecosystem restoration efforts.

Further details on the SERNbc approach to monitoring will be developed as the program expands. In the short-term, projects will involve specific VOITs and monitoring activity. Over time those specific ecosystem types that are treated by SERNbc will have consistent monitoring regimes applied.

9 Society Vision

9.1 Vision Statements

The following statements capture the five-year vision of SERNbc (2013-2018).

SERNbc will support the implementation of ecosystem restoration activities throughout the Omineca Region, with projects in each of the Resource Districts (Prince George, Mackenzie, Ft St James and Vanderhoof).

SERNbc will implement enough projects to create economies of scale to sustain a full time coordinator

SERNbc will intentionally partner with First Nations, governments and NGOs to secure funds and plan and implement ecosystem restoration.

SERNbc will provide value to agencies and other stakeholders in coordinating ecosystem restoration activities so as to reduce overlap, improve efficacy, and ensure ecosystems in greatest need have the highest priority.

SERNbc will be a respected contributor to forest and land management in the Region, providing information to government and NGOs regarding ecosystem vulnerability and management.

9.2 Governance and Administration

Context: SERNbc was established in January 2013, building from the organizational structure that had been established to support the Vanderhoof ER program. With an expansion to the Omineca Region, and a vision for a broader implementation of ER across the region and the planned growth of the program overall, the structure will need to continue to evolve in the coming years to ensure it is sustainable.

The current structure involves a Board of Directors (BoD) that includes individuals involved in both government and non-governmental organizations. The Ministry of Forests Lands and Natural Resource Operations currently chairs the board and addresses the day to day administrative requirements of the society. A Program Coordinator is also in place to support project level planning and implementation management.

Within the current environment, project specific teams are also developed to support the effective implementation of the project. These project teams may involve society or BoD members, First Nations and other interested stakeholders.

Strategy: As the activities of the society grow, the structure will need to change to ensure adequate attention is given to all aspects of the society. The following considerations will be made to allow the organizational structure of the society to adapt to the expected growth of the program:

Board of Directors – The BoD will be expanded further to include an individual with First Nations affiliations to provide an additional perspective to the Board. The BoD will give further attention to a number of key policies⁵ to ensure clear, transparent operation of the BoD:

- SERNbc Policy regarding board member nomination process, terms and roles/responsibilities – in support of the Constitution and Bylaws
- Code of Conduct - expanding on the constitution and bylaws to speak to how BoD, members and others associated with the society should act when on society activities.
- Conflict of Interest – to ensure the management of potential conflict of interest that may be present on the board. Key to this policy should be the need to declare the potential conflict of interest and have the board review and determine if the conflict of interest is acceptable.

Additional policies could also be considered as the program develops and efficiencies would be gained through documenting processes or requirements, i.e. project review process, internal and external communications protocol and information sharing and referral process.

Society Management and Coordination – As the size of the SERNbc program increases additional capacity should be allocated to the administration and management of the society. To this end, either base administration funding needs to be secured or an administrative allocation associated with each project should be used to support the management/administration of the society and the coordination of the activities of the society. A paid Executive Director or

⁵ Supported by the Vanderhoof Ecosystem Restoration Scoping Report. LM Forest Resource Solutions Ltd. March 2011.

Project Coordinator role could be used, with clear roles and responsibilities defined. Each would report to the board and have specific approved authority as directed by the board, to deal with the day to day activities of the society.

District ER Committees – As the activities of the society expand to include all areas within the region, district-based planning teams should be used. District Committees could be developed over time, depending on how quickly activity occurs within each district. The first few projects could be used as a means to flush out government and non-government affiliated members that are interested and able to contribute at this level. These teams should be considered committees, organized by and reporting to the BoD, with one member of the BoD present on each committee. It is recommended the committees be organized by FLNRO Resource District, with one for each of Prince George, Mackenzie, Ft St James and Vanderhoof Districts.⁶ Involvement on the District Committees can also be used as a way for individuals to develop an understanding of the society and used by the society to identify future candidates for the BoD.

Project Implementation Teams – Project implementation teams are currently used by SERNbc and should continue to be used as an effective way to incorporate input and expertise by interested stakeholders and contractors. Project Teams focus on the operational delivery of projects. The project teams should be made of at least one member of the respective District Committees, and could also involve stakeholders, First Nations and other interested parties. The size and nature of the team should align with the size and complexity of the projects. Involvement on project teams can also be used as a means to engage individuals in the activities of the society as a step to higher level involvement.

9.3 Partnerships

The following groups are identified as key partners for SERNbc.

British Columbia Provincial Government

Context: The provincial government, and specifically FLNRO, is currently supporting SERNbc through membership on the board of directors (Vanderhoof District stewardship, Prince George Regional Wildfire Management Branch and Northern Region of BC Parks are currently represented on the board). The society has received funding from the provincial government in the form of employee time to help coordinate the society activities in 2013, in kind support from the WMB as they coordinate and implement burning treatments on behalf of the society, as well as grant funding through the Provincial ER body in order to support the establishment of the society and implementation of project work in 2013/14.

The provincial government also has a number of different programs that potentially align with the activities of SERNbc. Each of these programs has their own focused objectives, but through collaboration and innovation, have the potential to also support ER activities. These programs include:

- Wildfire management and wildfire hazard reduction (as managed by Wildfire Management Branch or individual municipal or regional governments)
- Forests for Tomorrow (FFT)
- Small Scale Salvage (SSS)
- Landbase Investment Strategy(LBIS) - Fish Passage program and others, and
- BC Parks' ecosystem management activities.

The provincial government is the legal authority for most of the activities proposed by SERNbc.

Strategy: SERNbc will continue to work with the provincial government to further ecosystem restoration in the region. SERNbc will continue to rely on the WMB in the implementation of burning treatments and will coordinate activities with them in order to identify project opportunities that meet both ER and wildfire hazard reduction goals where possible. SERNbc will engage in discussions with the provincial government in order to obtain regular annual base funding as a continuing demonstration of support for the program. SERNbc will also coordinate and collaborate with other provincial programs to ensure that mutually beneficial programming and activities are secured and that duplication of effort is avoided.

First Nations

Context: Ecosystem Restoration activities within the Vanderhoof area, a precursor to the expanded geography of SERNbc, engaged First Nations at a project level. There is intent to expand the relationship between the society and First Nations, as it aligns with First Nations capacity and interest. To this end, SERNbc has initiated discussions with all First Nations with interests in the Omineca Region to understand interest and capacity for involvement with the ecosystem restoration activities supported by SERNbc.

⁶ Robson (i.e. the Robson TSA) may warrant a separate committee over time, depending on the amount of activity present, given the landbase and ecosystems in this area.

Strategy: SERNbc will continue to engage First Nations to further their involvement in the activities of the society, including but not limited to, membership and involvement in the society, involvement in sub-regional project planning and in the implementation of projects. SERNbc will look for opportunities to align First Nations interests and capacity with the activities of the society. This effort is in addition to standard referral or information sharing requirements associated with project related activities.

Research, Academia and Educational Institutions

Context: The activities of SERNbc rely on planning and implementation that is rooted in an understanding of past, current and expected ecosystem dynamics, vulnerability and the impact of restoration activities on ecosystem processes, structure, function and composition.

Strategy: SERNbc will develop relationships with interested academic institutions in B.C. to foster support for the program and identify synergies between the activities of the society and the research or monitoring interests of expert individuals or organizations. It is expected that these relationships will result in research design and sampling that will also support the project monitoring needs of SERNbc as well as foster an overall improved understanding of ecosystem dynamics, vulnerabilities and our ability to support the development of resilient ecosystems.

Relationships with education institutions will also provide opportunity for students to be engaged with the planning prescription or implementation of planned activities, including undergraduate or post-graduate students involved in research design or monitoring as well as high-school or university students being involved through volunteer or other alternatively funded education-based programs.

Non-governmental Organizations

Context: SERNbc currently includes board members that are also involved with BC Cattleman's Association, BC Wildlife Federation, BC Trappers Association and the Guide Outfitters Association of BC. Membership in the society includes individuals within each of these groups and associations as well.

Strategy: SERNbc will maintain relationships with NGOs with complimentary or aligned interests within the Omineca Region. These relationships will be fostered to;

- Ensure collaboration and a partnership model for ER
- Improve efficiencies in the implementation of ER
- Develop grass roots interest in, ownership of and support for ER

Funding Partners

Context: SERNbc is an externally funded society, with the BC Provincial Government, Habitat Conservation Trust Fund and the BC Cattlemen's Association currently supporting activities of the society with direct funding.

Strategy: SERNbc will diversify and expand funding partnerships in the delivery of ecosystem restoration in the Omineca. Partnerships will be developed where SERNbc is able to further ecosystem restoration across the region while supporting our partners in meeting their goals:

- Provincial Government – in order to support objectives of the society. Significant opportunity exists to align treatments that also meet funding requirements associated with interface fire hazard reduction activities.
- Regional/Municipal Governments – opportunities exist to secure funds from regional or municipal governments where ER treatments align with wildfire hazard reduction activities.
- Habitat Conservation Trust Fund – application for continued funding associated with planned projects.
- BC Hydro – Peace Region Fish and Wildlife Compensation Program – application for funds to support the society in general and in the implementation of projects, and investigate the opportunity of SERNbc playing a program delivery role for the FWCP.
- Private Development Companies – a series of oil and gas pipelines are currently proposed to cross the Omineca Region. New mines and mine expansion is also planned. SERNbc will connect with and develop relationships with proponents to identify common interests in ecosystem restoration and delivery.
- Non-governmental Organizations – licenced and non-licenced user groups or other associations or organization
- First Nations – First Nations, as individual bands or tribal councils, or through federally or provincially funded programs, have access to funding that could be used to support the implementation of ER in the region.
- Foundations – there are additional foundations or funds whose objectives may align with those of SERNbc. SERNbc will develop an understanding and relationships with key foundations in the implementation of the strategic plan.

9.4 Landscape Level Planning

Context - Landscape level planning and information provides context for ER activities and helps ensure that treatments are being carried out where they are the most effective.

Strategy - Over the short-term, potential projects will be reviewed and prioritized based on the expertise and experience of practitioners in the region. Over the long-term there is an intent to develop a broader understanding of ecological conditions and vulnerabilities across the region that will be used to both 1) prioritize projects that are brought to SERNbc for consideration and 2) drive the development of ER projects based on extent of ecosystem vulnerability and degradation across the region. Key landscape analysis projects are outlined below that reflect both strategic and formative analysis (i.e. Enduring Features Framework) and more operational modeling and analysis projects (i.e. review of species at risk habitat mapping and completion of a resource values matrix).

Enduring Features Framework – Under a changing climate, the Omineca Region can expect major transformations in biodiversity on land and in water. As the climate changes, ecosystems will adjust, and land cover may not be a reliable basis for long-term conservation planning. Given this, SERNbc will identify important “enduring features” that will remain unchanged over time, supporting a focus for conservation and restoration activities. GIS modelling will be used to collect and use geophysical data to determine the variety, density, and productivity of the enduring features across the landscape. During this assessment, SERNbc will also acquire any existing regional or landscape-scale mapping of potential ecological and habitat. Following this base assessment, habitat assessments will be completed in relation to enduring features for focal species, including critical habitat for threatened species, and maintaining habitat connectivity. Interpretive mapping products will also be created that identify ecosystem processes, important structural elements, and potential ecological change that will provide support to ER and land management decision making.

Species/Ecosystem Specific Ecological Modeling – The provincial government (FLNRO) has implemented a number of species and ecosystem specific ecological models that are being used to identify priority areas for legal protection or conservation (i.e. Wildlife Habitat Area designation). Although this analysis has been developed in support of a specific application, in response to specific legal tools that the ministry has in place to protect species or ecosystems at risk, the analysis represents a starting point for more landscape level planning in support of species or ecosystems at risk. SERNbc will use the analysis to inform the selection of sites and priorities.

Vulnerable/Degraded Ecosystems – In some cases, vulnerable or degraded ecosystems can be spatially defined at a regional scale. Where these exist (i.e. blocked fish passage or ingrowth within open forest conditions), region-wide understanding of conditions can be used to prioritize sites or focus ER planning attention.

Natural Disturbance Units – A detailed understanding of natural disturbance patterns has been developed for the whole of the Omineca Region (as well as other parts of Northern B.C.) (DeLong, 2011). The analysis develops a broad understanding of how current disturbance patterns associated with forest harvesting, fire and forest health mimic those patterns that have historically been in place. Natural disturbance patterns are understood to be desirable conditions that will support a broad range of values on the land. Where NDU benchmarks are not being met, overall landscape-level pressures on ecosystems are expected. Such areas could be prioritized for consideration by SERNbc depending on the type of treatments being considered. Use of the natural disturbance unit analysis will need to be informed by anticipated impacts of climate change and potential changes in ecosystems and disturbance regimes.

Resource Values – SERNbc will focus on areas where ER treatments will have benefits to multiple ecological and/or socio-economic resource values. Understanding where the resource values are spatially located will support project prioritization. SERNbc will develop a “values matrix” that will spatialize resource values on the landscape (i.e. map resource values across the region) to support project selection and prioritization.

9.5 Project Development Process

Context – Current ER activities take place across the region through a range of different mechanisms, from one-off individually driven initiatives to SERNbc coordinated activities. Since the inception of the society in January of 2013 to present, there has been a growing interest from individuals, government agencies and funding groups to have certain activities coordinated or endorsed by SERNbc. SERNbc implements ER through a multiple stake-holder, balanced decision making process that is supported by the provincial government and viewed as being beneficial by individuals and groups looking to implement or fund ecosystem restoration work.

SERNbc partners with individuals or groups where grass-roots interest in ER is evident and acts to secure funding to facilitate the implementation of ER.

Strategy – In order to further support the understanding of the role of SERNbc to those interested in completing and funding ER in the Omineca Region, SERNbc will further develop procedures and documentation to address the following aspects of project planning;

- Sources for project ideas and how each are adjudicated
- Process required for SERNbc endorsement of an independent project
- Project Flow Process – that documents project from inception to implementation and monitoring – different paths and implementers.
- Role of SERNbc and individuals within the SERNbc organization in the project planning process
- Role of SERNbc in the coordination of burning related projects involving the Wildfire Management Branch⁷

The project planning process and documentation outlined here would be in concert with discussions above on project short-listing and prioritization.

9.6 Communication Strategy

Strategy - Following the completion of the Strategic Plan, SERNbc will engage in the following communication efforts in order to continue to make land and resource managers, users and the general public aware of the society, providing opportunity for further engagement and support for ER in the region.

Strategic Plan - Place Strategic Plan on the society website and complete follow-up email notification to all SERNbc contacts.

Society Membership - Follow-up with interested stakeholders (as identified during strategic planning process) and complete a membership drive to secure further interest in and exposure to the activities of the society.

First Nations - Further conversations with First Nations about potential involvement in the society.

Partners/Funding Groups - Communicate the strategic plan to potential partnership organizations including funding partners.

⁷ The Wildfire Management Branch in the Omineca Region is interested in the society acting as a coordinator of all ER related burning projects that they partner in.