

## AGENDA RESILIENT SAANICH TECHNICAL COMMITTEE August 17, 2023, 6:30– 8:30 PM Held virtually via MS Teams

In light of the Saanich Communicable Disease Plan related safety measures, this meeting will be held virtually via MS Teams. Details on how to join the meeting can be found on the committee webpage – Resilient Saanich Schedule, Minutes & Agendas.

## 1. Territorial Acknowledgement

2. Approval of Agenda

## Pg. 2 - 4 3. Adoption of Minutes

- June 15, 2023 meeting
- 4. Receipt of Correspondence

# Pg. 48 - 49 5. Discussion with Diamond Head Consulting on Biodiversity Conservation Strategy (BCS) Actions and Strategies (90 min.)

Leads: Mike Coulthard, Alison Kwan

## Pg. 5 - 19 and 6. Ratification of Stewardship Brief (10 min.)

excel document • Lead: Chris Lowe

## Pg. 20 - 28 7. Ratification of Collated Response to DHC BCS document (15 min.)

- Lead: Tory Stevens
- Pg. 29 34 8. Discussion of RSTC Motions (2020-2023) (15 min.)
  - Lead: Tory Stevens

## Pg 35 - 47 9. Upgrade to Environmental Policy Gap Analysis (10 min.)

Lead: Kevin Brown

#### MINUTES RESILIENT SAANICH TECHNICAL COMMITTEE Via Microsoft Teams June 15, 2023 at 6:34 p.m.

- Present: Tory Stevens (Chair); Councillor Zac de Vries; Kevin Brown; Jeremy Gye, Chris Lowe, Stewart Guy and Brian Wilkes
- Regrets: Tim Ennis and Purnima Govindarajulu;
- Staff: Suzanne Samborski, Director of Parks, Recreation and Community Services; Eva Riccius, Senior Manager of Parks; Thomas Munson, Senior Environmental Planner; and Megan MacDonald, Senior Committee Clerk

## TERRITORIAL ACKNOWLEDGEMENT & DIVERSITY, EQUITY AND INCLUSION STATEMENT

Councillor de Vries read the Territorial Acknowledgement and the Diversity, Equity and Inclusion Statement.

#### APPROVAL OF AGENDA

MOVED by B. Wilkes and Seconded by S. Guy: "That the Agenda for the June 15, 2023, Resilient Saanich Technical Committee meeting be approved."

#### CARRIED

#### **APPROVAL OF MINUTES**

## MOVED by C. Lowe and Seconded by B. Wilkes: "That the Minutes for the May 18, 2023, Resilient Saanich Technical Committee meeting be approved as amended."

#### CARRIED

<u>Note</u>: A change on page 3 was noted as the committee will be continuing work, not beginning work on the Environmental Policy Framework.

#### **RECEIPT OF CORRESPONDENCE**

Correspondence was received and included as part of the agenda. It was noted that the amendments to the lists of species at risk need to be corrected as noted in the email.

## STRATEGIC OFFICIAL COMMUNITY PLAN UPDATE

The Senior Manager of Parks advised that the planning department is seeking feedback on the strategic Official Community Plan update. A memo was included with the agenda for committee members to review, which provides information on the opportunities for engagement. Resilient Saanich Technical Committee (RSTC) members were encouraged to provide their feedback via the methods outlined, as well as to encourage other community members to do the same. The survey will be closed on June 30<sup>th</sup>, direct feedback can be accepted until early July. Committee members noted the effectiveness of the Urban Containment Boundary to focus major roadways within the boundary and maintain the rural feel outside the boundary.

## PRESENTATION OF ENVIRONMENTAL POLICY FRAMEWORK PRINCIPLES

The Principles of the Environmental Policy Framework (EPF) were discussed, the following was noted:

- The working group met to discuss the draft principles, minor edits were made from the April version, which focused on refining and clarifying the intent.
- The EPF working group needs the principles to be finalized to move forward.
- A suggestion was made to update #3 by replacing the word "incomplete" with insufficient. Committee consensus was that this change was supportable.
- Inserting a reference to #3 would be an option, as well as the mention of adaptive management which was discussed previously.
- The wording of #7 could be clarified that the collaboration is with people.
- #8 could be split into two clearer sentences, however the working group wanted to keep the number of principles low. This was a compromise that maintains the intent.

## MOVED by B. Wilkes and Seconded by J. Gye: "That the environmental policy framework principles be accepted with the amendment to #3 as discussed."

## CARRIED

## REVIEW OF BIODIVERSITY CONSERVATION STRATEGY AND RSTC WORKPLANS

The Director of Parks, Recreation and Community Services and the Senior Manager of Parks reviewed the Milestone 3 Workplan. Discussion took place and the following was noted:

- The scope of work from Diamond Head Consulting (DHC) was shared, along with the timelines for the Milestone 3 workplan and opportunities for committee input.
- The role of the committee, the consultant, and intersectionality should be understood.
- Committee members noted their desire of having the ability to work more closely with the consultant.
- DHC is putting together information and will be joining the August RSTC meeting to discuss proposed policies, actions and stewardship. They will then write the draft strategy, which the committee will have the opportunity to discuss prior to public engagement. Revisions will be made following public engagement, and the committee will be able to give comment one more time before the strategy is considered by Council.
- The scope of work is clearly defined, the budget and timelines cannot be altered now.
- If committee members have comments or ideas the best process is to discuss them at a meeting, following which the Senior Manager of Parks can update DHC as needed.
- The intention of doing the State of Biodiversity Report first was to have it inform the Biodiversity Conservation Strategy.
- Some committee members desire to have a partnership between the consultant and the committee; and would like more discussion and input in the creation of strategy.
- Council has made it clear that a strategic approach to finish the process on time is necessary. The best outcome would be for full support from RSTC, however the delivery deadline is not negotiable. This requires effective management of time and processes.
- The strategy will be a living document that will change overtime with ongoing monitoring and evaluation. There will be opportunities for improvement along the way.
- Once a consultant is hired, they take over from staff, there is little input from staff until the draft document is ready for review. DHC is experienced and trusted by staff.
- Additional members of the committee echoed their preference to provide more information to DHC and be more involved with the creation of the strategy.
- While common ground is important, and although members want to give input, the consultant may or may not include it with the final report and strategy.

- Council has made clear the expectation of the strategy being on time and on budget.
- There will be a few touchpoints for the RSTC to give input on the strategy.
- The environmental policy gap analysis being finalized by September 4<sup>th</sup> would be ideal.
- The Urban Forest Strategy is being updated; a draft is expected in the fall. RSTC will have engagement opportunity prior to Council consideration.
- Recommended improvements to the Climate Plan have been reviewed and supported by the Manager of Sustainability. These will be included when the plan is updated.
- The Stewardship Working Group has updated their briefing note, which will be sent to DHC. The earlier they have this document the better they can incorporate it.
- Staff will check with DHC if there are additional opportunities for committee feedback, what information they would find useful and where RSTC could add value.
- Some committee members noted that workshops to provide input to specific questions or topics before the draft strategy is written to be able to influence the draft would be beneficial. The previous input on the draft State of Biodiversity Report was not incorporated in a meaningful way.
- Members of the committee can provide individual input when engagement is open.

## DISCUSSION OF JULY MEETING

Discussion took place and the following was noted:

- Several committee members will be away during the summer and there are not many agenda items for a meeting in July. It was decided that the committee will not meet in July.

## ADJOURNMENT

On a motion from C. Lowe the meeting adjourned at 8:25 p.m.

## NEXT MEETING

The next meeting is scheduled for August 17, 2023 at 6:30 p.m.

Tory Stevens, Chair

I hereby certify these Minutes are accurate.

Committee Secretary

## **Considerations and Recommendations for Enhanced Stewardship in Saanich**

### Briefing Note from the Resilient Saanich Technical Committee to Saanich Staff and Consultants

### July 1, 2023

The Resilient Saanich Technical Committee (RSTC) was mandated to advise on development of a "Stewardship Program" in the November 2017 motion by Council initiating the Resilient Saanich process. "Stewardship Program" was modified to "enhanced Stewardship Program" and "Enhanced Stewardship Program" in the <u>Terms of Reference</u> (TOR) last updated in October 2021. In this brief, we consider "stewardship" and "enhanced stewardship" as equivalent.

The District currently lacks a municipal-level and comprehensive Stewardship Plan, as noted in the TOR. The Plan is the roadmap for a Stewardship Program. We understand that a Stewardship Plan will either be included in the Biodiversity Conservation Strategy (BCS) under development or stand-alone and be closely integrated with it.

Our intent in this brief is to highlight some issues which should be addressed in the plan, including what we think "stewardship" entails (why, what, who, where, and how), and ways the District can facilitate stewardship to enhance biodiversity, and the condition and resilience of Saanich's natural environment.

#### Summary of Recommendations for the Stewardship Plan and District Actions

The Stewardship Plan and subsequent Program should:

- Support key priorities, goals, and objectives identified in the BCS for biodiversity protection and enhancement and ecosystem restoration, rehabilitation and reclamation<sup>1</sup> for different land ownership types and areas.
- Clearly define what stewardship encompasses in the context of Resilient Saanich and the BCS
- Commit to developing and maintaining a publicly- accessible inventory of District- and community-led stewardship programs. This helps identify stewardship gaps and facilitate partnerships among the District and community.
- Encourage community science programs to collect data for documenting biodiversity and condition of the natural environment and ensure timely and open accessibility to collected and vetted data.
- Include metrics to assess the effectiveness of different stewardship approaches with respect to ecological condition and biodiversity on public and private lands, and commit to monitor and report their effectiveness.
- Commit to maintain and publish ecological conditional assessments as a baseline for assessing future stewardship programs.
- Assess the contrasting strengths and weaknesses of District- and community-led stewardship and how to best utilize the strengths of each in developing effective partnerships.

<sup>&</sup>lt;sup>1</sup> Gerwing, T.G. et al. 2021. Restoration, reclamation, and rehabilitation: on the need for, and positing a definition of, ecological reclamation. Restoration Ecology 30. <u>https://doi.org/10.1111/rec.13461</u>

- Assess how best the District can support community-led stewardship efforts.
- Affirm the need to ensure sufficient District staffing to support stewardship and increase restoration efforts on public lands (including public rights of way and boulevards), and to facilitate stewardship on private properties.
- Commit the District to meet or exceed the standards set by potential regulations for private lands.
- Encourage residents to voluntarily steward biodiversity on their properties and on public lands through positive publicity, financial incentives based on meeting appropriate biodiversity targets, and other approaches.
- Enhance and incentivize stewardship by developers and landscapers.

Further details about these recommendations can be found below.

#### **Background and Broad Concepts**

The concept of stewardship has a long history and has been characterized in different ways<sup>2</sup>. Defining stewardship in a way appropriate to Resilient Saanich is necessary as it facilitates communication and guides the development of potential stewardship policies.

We suggest that stewardship refers specifically to environmental stewardship, or <u>the desire and actions</u> <u>taken by the community to protect, maintain, restore, and enhance biodiversity and associated</u> <u>ecosystem functions for current and future generations of human and other life</u>.

Environmental stewardship both enhances the natural environment and, more broadly, promotes community involvement and participation by residents, i.e., civic engagement<sup>3</sup>.

Environmental stewardship in the community can include many activities and issues, occur at different scales, and be organized and governed in different ways. For example:

Actions can be:

- Direct (e.g., removing trash, removing invasive plants, planting trees, establishing pollinator meadows); or
- Indirect (e.g., environmental education, fundraising, data management) i.e., actions which do not directly "improve" the natural environment but which facilitate or encourage direct actions.

Actions can include:

- Physical labour, applying specialized skills for planning and organizing actions, and citizen sciencerelated data collection and dissemination.
- Efforts to improve the ecological condition of existing natural sites, naturalize gardens to increase biodiversity and build resilience to climate change, and minimize the impacts of one's built environment on nearby native species, for example minimizing inappropriate lighting and sound to protect local or migrating insects, bats, and birds.

<sup>&</sup>lt;sup>2</sup> Welchman, J. 2012. A defence of environmental stewardship. Environmental values 21. <u>https://doi.org/10.3197/096327112X13400390125975</u>

<sup>&</sup>lt;sup>3</sup> Johnson et al. 2019. Context matters: influence of organizational, environmental, and social factors on civic environmental stewardship group intensity. Ecology and Society 24. <u>https://doi.org/10.5751/ES-10924-240401</u>

Actions can vary in complexity and scale from individuals to large, organized groups and programs.

Here, stewardship is considered to apply to the natural environment on private and public land in Saanich. However, practices in Saanich that also benefit the natural environment of other areas should be encouraged and celebrated. Stewardship activities are often placed-based (e.g., a park, stream, neighbourhood) rather than issue-based.

Civic environmental stewardship is often considered to be performed by the community, typically as unpaid volunteers, although participation can be encouraged by fiscal or other incentives. We suggest that "stewardship" in the context of BCS, also include actions by paid workers engaged in stewardship activities. For the latter, some may argue that "stewardship" involves actions above and beyond those of normal business operations.

Municipal stewardship activities and programs may be primarily municipal government-led or community-led, with varying degrees of partnership. Government-led programs should include active engagement with, or participation by, the community. Community-led activities often have strong underlying motivations and desire to act, but lack capacity and need logistical or financial support from government.

#### Voluntary versus Regulatory Approaches

We suggest that, for the purposes of Resilient Saanich and, specifically, the BCS, that "stewardship" refer to actions done as unpaid volunteers incentivized by non-regulatory means, or as paid employees.

Some would argue that "stewardship" encompasses voluntary <u>and</u> regulatory approaches. Considerations:

- Both approaches seek to protect and benefit the natural environment, but the motivations differ.
- Both approaches require monitoring to assess their effectiveness.
- The distinction between voluntary and regulated actions is consistent with arguments raised by some private property owners against the previous EDPA. The public won't accept being regulated when the District does not hold itself to the same standard.
- Voluntary stewardship applies across public and private lands, but comparable municipal regulations typically apply only to private lands.
- The BCS is intended to consider and prioritize the broad suite of actions which could protect and enhance biodiversity. (Voluntary) stewardship is a subset of the suite of possible policy approaches; mandated policies (regulations) are another subset.
- Voluntary and regulatory approaches can be complementary rather than exclusive.

Most people likely prefer to voluntarily do stewardship-type activities and be encouraged appropriately, rather than being required to take those actions. However, voluntary approaches may be insufficient to protect biodiversity and desirable ecological goods and services on privately-owned lands, especially given the potential financial attraction of other land uses. Regulations may discourage voluntary stewardship by some people; conversely, regulation may encourage additional voluntary stewardship actions above and beyond minimum legal requirements, and greater appreciation and desire to protect

the natural environment. Appropriate encouragement and extensive buy-in by the community is necessary to ensure the effectiveness of regulated stewardship.

The RSTC recognizes that balancing voluntary stewardship and regulation in the context of continued development will be politically challenging, but this does not preclude the need for both approaches. Voluntary stewardship approaches and regulations should complement each other.

#### **Existing Stewardship Programs**

There are many stewardship programs already in place in Saanich or that have been developed elsewhere and could be implemented in Saanich. Resilient Saanich Factsheet 7 (FS7) provides ca. 10 examples of stewardship programs in Saanich and examples of programs in other cities which might be applicable to Saanich.

We conducted a scan of District-led and community-led stewardship organizations operating in Saanich to supplement the FS7 list and attempted to categorize them based on whether they were District- or community-led, their focus, and whether they emphasized stewardship on public or private property (see attached draft spreadsheet). While this list is incomplete, we still found **60+** organizations or specific District programs engaged in stewardship.

#### Initial conclusions:

- 1) Most organizations or programs focus on stewardship of public lands and waters, rather than private.
- 2) Many programs, mainly community-led, focus on aquatic ecosystems and fish habitat and have varying degrees of partnership with the District and other municipalities in the CRD. Some other programs, again community-led, focus on certain taxonomic groups, including native plants, bats, birds and insects and other pollinators.
- 3) Some programs (such as Pulling Together, the native plant salvage program & PLUS [propagation, learning, using, sharing]) are Saanich-driven and funded, and rely heavily on unpaid community volunteers. Naturescape, while province-wide, is promoted in Saanich by the District and focuses on private property.
- 4) Some programs are largely independent of Saanich and led by community groups or NGOs, such as the Green Shores programs and Habitat Acquisition Trust's Good Neighbours programs. A hybrid governance model is that of Swan Lake Christmas Hill Nature Sanctuary which is on District land and receives partial (ca. 50%) funding for operations from the District; however, stewardship is administered by a non-profit society which receives its remaining funding from external sources. Similarly, Haliburton Farm and the Horticultural Centre of the Pacific are administered by non-profit societies on land owned by the District, although their stewardship efforts differ from those of Swan Lake Christmas Hill.

Regardless of whether a stewardship program is District- or community- led, there is likely to be some partnership between the District and community.

Clearly, there are many stewardship programs operating in Saanich, either District- or community-led, focusing on a variety of stewardship issues, land ownership, and scale. It is not clear how many members of the community in total are actively involved, but the number and variety of active

organizations and programs and focus suggests a strong existing interest in stewardship in the community. That interest should be supported.

The RSTC strongly supports a variety of stewardship programs in Saanich. However, it is unclear how effectively existing stewardship programs, whether District- or community-led, protect and enhance biodiversity and ecosystems in Saanich. This uncertainty, and the need to measure and monitor effectiveness, should be addressed in the BCS as part of recommendations for enhanced stewardship.

#### Gaps and Weaknesses in Existing District-led Stewardship Programs

The RSTC has not been able to assess the funding or functioning of District-led stewardship programs. Our comments reflect an outside view, similar to what the broader community might have.

It is unclear how biodiversity and associated stewardship are considered in stormwater and some other environmental management plans currently under development by the District. Application of the inprogress Environmental Policy Framework should help resolve this issue.

There is a backlog in producing park management plans. This delays ecosystem restoration, rehabilitation, and reclamation projects in parks.

The District lacks biodiversity and ecological data needed to set stewardship targets and evaluate progress (see Objectives, Targets, and Metrics section below). This is needed to prioritize stewardship actions.

A significant amount of potential habitat for native plants and some animals, including pollinators, occurs on private properties and adjoining public rights of way or boulevards. There seems to be little active support from the District in supporting voluntary stewardship on private properties. Support is mainly through Naturescape. The program has existed since the mid-1990s and is referred to in various Saanich policy documents, but participation rates are unknown. A presentation to RSTC by staff in January 2022 indicated that the program (at that time) provided "Naturescape in Progress" lawn signs for loan and provided recommendations to developers and property visits and advice (under the Noxious Weeds Bylaw). However, the program was also said to be severely budget-limited. Its current effectiveness is unknown.

Saanich arborists may provide on-site advice regarding private trees in the context of requests for maintenance or removal, but do not provide similar advice on biodiversity stewardship.

Saanich Engineering administers regulations pertaining to native vegetation establishment and maintenance on public boulevards and rights-of-way in residential areas. Such sites can be suitable for enhancing native biodiversity and be suitable local stewardship sites for neighbors, and neighborhood and community associations. However, the process for establishing native vegetation along such rights of way has been said to be onerous.

The District may <u>lack</u> staff capacity to carry out various stewardship and other biodiversity-related actions such as:

- Increasing the number of Pulling Together projects in Saanich Parks. Staff have suggested in presentations to the RSTC that projects are more limited by the ability of staff to coordinate volunteers and plan projects than by the number of willing volunteers.
- Ensuring natural state covenants are maintained effectively.
- Enforcing existing bylaws such as the bylaw prohibiting the feeding of native wildlife.
- Providing on-site advice to residents on stewardship opportunities, as they do for tree permits.
- Evaluate stewardship success over time and space.

#### **Existing Communications and Outreach**

The District does stewardship outreach through programs such as Natural Intelligence and the quarterly publication Our Backyard, and solicits volunteers through various social media. The Natural Intelligence program has been well-publicized through local media and Saanich social media platforms. It is unclear how the effectiveness of these outreach programs has been assessed. Some existing programs, such as the native plant salvage program & PLUS, Naturescape, Green Shores (or similar), and the Significant Tree Program, appear to have little promotion and uptake.

#### **Existing Funding and Fiscal Incentives**

The District provides financial and/or in-kind support on stewardship activities with non-profit partners through financial and in-kind contributions, and it provides financial assistance for specific projects via community grants.

In addition, property owners who agree to have a notable tree on their property designated as a "Significant Tree" are eligible for grant support to do needed proactive maintenance. The District's incentive for private property owners to accept additional protection for notable trees is unique among notable tree programs in North America. To our knowledge, there are not other financial incentives for private property stewardship.

#### **Existing Recognition**

The District has recognized outstanding environmental stewardship contributions from individuals, group and business through the annual Environmental Awards, typically one in each category per year. We are unaware of other formal recognition programs.

#### **Issues and Approaches to Consider Going Forward**

Effective civic environmental stewardship requires attention to areas of ecological concern and, as a largely voluntary endeavor, careful thought and effort to ensure the community buys into stewardship and is actively involved. The community must feel some "ownership" of stewardship programs and be able to participate in activities they see as both enjoyable and meaningful.

Saanich has strengths to build on in enhancing environmental stewardship, including a range of ecosystems that would benefit from enhanced stewardship, and with existing community awareness and involvement with natural environment issues. Setting appropriate ecological priorities while understanding and acknowledging what motivates the community will help determine the success of "enhanced stewardship".

Enhanced stewardship efforts should be well-planned, adequately funded, inclusive, broad-reaching, impactful, and complement, not conflict, with environmental regulations. Some specific suggestions for the municipality to include in the Stewardship Plan are to (in no particular order):

- Clearly articulate objectives.
- Build on existing stewardship and citizen science programs.
- Seek out and utilize the knowledge of local experts.
- Quantitatively (metrics and targets) evaluate stewardship success over time and space.
- Adequately resource staff to facilitate stewardship on both public and private lands.
- Support community-led initiatives (e.g., with financial or in-kind support and incentives).
- Recognize that people have different motivations to be environmental stewards.
- Provide opportunities to participate for people who do not own property in Saanich.
- Encourage participation through education and outreach.
- Develop and maintain partnerships with diverse groups, such as: environmental groups, community associations, academic institutions, other levels of government (e.g., VIHA), property developers, and landscaping professionals
- Tailor stewardship approaches (what, who and how) to land type and ownership. For example, public vs. privately-owned land inside and outside of the urban containment boundary (UCB), District- owned parkland and other protected natural areas, District- owned boulevards and rights of way in residential areas, and privately-owned gardens.
- Increase stewardship efforts on District-owned lands: these are a significant part of Saanich and encompass likely biodiversity "hot-spots". This also sets a positive example for the community.
- Target areas at risk of imminent loss, biodiversity hotspots and public and private land hosting ecosystems and species at risk.
- Consider biodiversity beyond vascular plants, including soil and aquatic life.
- Prioritize native species and natural ecosystem functions, but recognize that non-native species have valuable ecological roles in the urban landscape.
- Consider spatial scales from local (e.g., Bowker Creek) to district-and region-wide efforts (e.g., hub/corridor protection and enhancement).

Some programs are logically directed and managed by the District. Others may be best initiated and led by the community, with appropriate encouragement and support from the District. Community-led and District-led programs each have their own strengths and weaknesses. The District and community must determine what type of partnership is most appropriate for given situations. The District should be open to a variety of governance models.

#### **Objectives, Targets, and Metrics**

Stewardship should be encouraged District-wide. However, the District may want to target and promote stewardship in specific areas, based on factors such as the desire to enhance the hub/corridor network, create buffers around protected and riparian areas, and protect ecosystem integrity in Rural Saanich. Targeted areas for enhanced stewardship should be identified and rationalized in the BCS.

Stewardship objectives should relate to the underlying objective of stewardship as defined earlier. They will vary based on the scale and spatial coverage of any given stewardship program.

Any enhanced stewardship programs that the District promotes should have clear rationale and objectives. This is necessary to build and maintain community support and to ensure progress can be measured.

Examples of enhanced stewardship objectives include:

- 1) Restoration, reclamation, and rehabilitation of sensitive ecosystems to the maximum extent possible, including urban watersheds and the marine foreshore
- 2) Increased planting of native plant species, or non-native species suitable to maintain ecosystem function in a changing environment.
- 3) Maintenance and enhancement of tree canopy and biodiversity hubs/corridors.
- 4) Establishment of backyard biodiversity enhancement as a public priority. Use of nature-based solutions, e.g., for stormwater management and infiltration, heat island reduction

This list is not exhaustive but covers many broad biodiversity conservation concerns identified by the RSTC to-date.

All stewardship programs should have clearly defined targets, but developing targets is a challenge.

For example, sensitive ecosystem rehabilitation or restoration targets would likely be different for public versus private lands. In parks, the target may be to restore sensitive ecosystems to a natural state or restore ecosystem function with habitat and non-native species that provide equivalent ecosystem services. However, restoration of all private lands within the Urban Containment Boundary to a natural state is not feasible, and "naturalizing" should be the target. Residents should be encouraged and incentivized to restore sensitive ecosystems on their properties where possible, increase the amount of appropriate native vegetation in gardens, reduce the area of impermeable surfaces and improve soil health, and minimize the impacts of their built environment on habitat for desirable native fauna. Targets could be in support of expanded hub/corridors.

Examples of targets include:

- 1) Increasing tree canopy by 5% per year
- 2) Daylighting 100m of creek per year
- 3) Eliminating 75% of invasive species from parks and 100% of priority invasive species from parks and non-park public lands
- 4) Soil retention on property, neighbourhood, and district scales
- 5) 70% of native species in your backyard
- 6) 50% of residential properties with 25% native species by 2030

Enhanced stewardship programs should also include quantitative metrics, and like objectives and targets, metrics will vary by program. Without metrics, the ability to assess success of efforts over time and space will not be possible. Suggested stewardship metrics include, but should not be limited to:

- 1) Tree canopy and/or native species coverage area
- 2) Change in seral stage (e.g., to assess success of reducing lawn and enhancing (ideally) native shrub coverage under urban tree canopy)
- 3) Number of rare and endangered species present

- 4) Permeable area
- 5) Effectiveness of stewardship programs (e.g., hectares of natural ecosystem restored/rehabilitated through the Pulling Together program)

Overall, most targets and metrics would be used by staff to evaluate stewardship success over time and space. However, others could be used to encourage the public to steward their properties and give them goals to achieve and feel success in their efforts.

#### **Generating Community Participation**

Addressing the gaps and issues listed above will help foster stewardship. However, there are additional barriers to stewardship participation.

The District was criticized when implementing the EDPA.<sup>4</sup> Some residents felt it unfair that biodiversity and ecosystem standards required of some private properties were not also required on adjacent Saanich Parks or non-park public lands. Others felt that sensitive ecosystem designations were improperly assigned to their properties.

To set a positive stewardship example for private landowners, the District must show it is committed to enhancing biodiversity and ecosystem condition in all public lands. This will likely require additional District staffing and continue to rely heavily on the work of volunteer stewards.

Many Saanich residents do not own land and private yards to steward. Therefore, opportunities to participate beyond backyard biodiversity should be promoted to non-landowners. Programs such as Pulling Together can be particularly effective in this regard.

Relying <u>solely</u> on "sensitive ecosystem" definitions and terminologies should also be avoided when identifying areas for prioritized stewardship and/or regulation, as few sensitive ecosystems remain intact in urban Saanich. Complementary approaches, particularly in fragmented and disturbed areas, include targeted enhancements of plant biodiversity appropriate to site conditions and efforts to enhance soil health. Any approaches must have broad community support to succeed.

Community-driven grass-roots stewardship initiatives, if appropriately sized and focused, may be able to act sooner and get more community support and participation than District- led initiatives; the latter are subject to municipal strategic planning processes and competition with other municipal priorities. Examples of focused community- driven initiatives include neighborhood cleanups, citizen science initiatives such as those associated with salmonid fish habitat, hyper-local terrestrial restoration efforts such as along public rights-of-way and boulevards (which are all potential habitat and biological corridors), and local workshops to promote native biodiversity on private property, build healthy resilient soil, and mature tree maintenance on private property. Local neighborhood community associations are in a unique position to support such stewardship initiatives; many already do. The District should enact policies which support such community- led initiatives.

Private property stewardship to enhance native biodiversity, maintain and retain mature trees, and otherwise encourage ecological goods and services (e.g., soil health and function, reducing stormwater

<sup>&</sup>lt;sup>4</sup> Diamond Head Consulting. 2017. District of Saanich Environmental Development Permit Area Independent Review. 77 pp.

runoff) can be encouraged by various means discussed elsewhere in this brief. To reiterate, these could include:

- 1) Educational resources and on-site visits.
- 2) Financial or other incentives; and
- 3) Positive publicity and recognition, including signage.

Appropriate goals and targets are needed and the effectiveness of programs needs to be monitored. Stewardship of boulevards and public rights of way<sup>5</sup>, also known as "hellstrips"<sup>6</sup>, complements private property stewardship efforts. The District should encourage, not discourage, planting and maintenance of native vegetation that supports pollinators and other ecological goods and services. While the District needs to set standards for boulevard native plant establishment and maintenance, local neighborhood and community associations are well-suited to lead and encourage local stewardship initiatives on both private properties and adjacent public boulevards.

#### Funding

The RSTC does not know how well the District funds stewardship activities in Saanich. However, chronic underfunding of parks, urban forest and natural areas stewardship has long been a problem in North American cities. To partly address this problem, many cities work with non-profit organizations which can access external funding sources to help pay for stewardship initiatives. Saanich already does this, for example, with the Swan Lake Christmas Hill Nature Sanctuary Society and Peninsula Streams. It is worth examining whether this model can be expanded to improve community participation and stewardship outcomes on other public lands while lowering direct costs to taxpayers.

The RSTC feels that additional District staffing is needed to steward park land, including increasing the number of projects, volunteer participation, and ecological monitoring through the Pulling Together program. Additional resources are also likely needed to facilitate community stewardship of private properties and neighborhood rights-of-way and boulevards, and to develop and maintain an accessible database and GIS layers of community-based initiatives and citizen science-collected biodiversity data.

The District already has a community grants program which appears applicable to local stewardship projects<sup>7</sup>. The District should examine how this program can be optimized to encourage community-driven stewardship.

Another possible funding approach is a Local Conservation Fund. Such funds, often based on parcel taxes, have provided funding support to biodiversity conservation groups elsewhere in BC<sup>8</sup>. Associated changes to property taxes are complicated to implement and would likely require bylaw consultation, development and revision.

- <sup>7</sup> https://www.saanich.ca/EN/main/community/community-grants.html
- <sup>8</sup> See <u>https://www.cdfcp.ca/wp-content/uploads/2022/02/Conservation-Fund-Guide-2nd-Edition-2017.pdf</u>

<sup>&</sup>lt;sup>5</sup> e.g., <u>https://www.toronto.ca/ext/digital\_comm/pdfs/transportation-services/green-streets-technical-guidelines-document-v2-17-11-08.pdf</u>

<sup>&</sup>lt;sup>6</sup> <u>https://extension.psu.edu/hellstrip-planting</u>

The District should consider providing subsidies or incentives to participate in private property stewardship. An existing example is the tree maintenance subsidy for Significant Trees on private property. Other possible examples include:

- Subsidized native plant supplies<sup>9</sup>
- Incentives to protect and maintain environmental features other than Significant Trees
- Reductions in property taxes based on percentage of native species or tree canopy
- Grants to encourage planting pollinator-friendly gardens with emphasizing native plants (such as the State of Minnesota "Lawns to Legumes" program<sup>10</sup>)
- Incentives to minimize impermeable surfaces, such as in Victoria (Rainwater Rewards<sup>11</sup>) and Portland Oregon (Clean River Rewards<sup>12</sup>).

#### Recognition

The District annually recognizes an individual, business and organizations for exemplary environmental stewardship. The Naturescape program is featured on the Saanich website, but is not actively promoted. The Green Shores program<sup>13</sup> is a province-wide program targeting shoreline habitats. The Habitat Acquisition Trust Good Neighbors program<sup>14</sup> and Meadow Makers are more local programs that provide stewardship recognition, the latter associated with a certification program<sup>15</sup>. Other programs which might be adaptable to Saanich include Backyard Habitats<sup>16</sup> and Edmonton Master Naturalists<sup>17</sup>. The former is led by community organizations, with support from local governments; the latter is led by the City.

The District needs to evaluate different programs and decide what and how is most suitable for recognizing private property stewardship efforts and successes. Secondly, the District and community need to decide how best to celebrate those who meet the standards so as to inspire the broader community.

## **Native vs Non-native Species**

Ecological restoration with native species is desirable but not always feasible. In addition, climate change will complicate approaches to restore native vegetation and ecosystem services. As noted above, landscape architects, trained landscapers and their suppliers could become valuable promoters of native species and advise on the selection and appropriate use of non-native species, and on practices that minimize the spread of invasive species.

Restoration and rehabilitation of native species on private property should be acknowledged and celebrated, while the appropriate use of non-native species should not be discouraged. Development of a guide to available native species and "beneficial" non-native species would be helpful.

- <sup>9</sup> e.g., LEAF in Ontario <u>https://www.yourleaf.org/</u>
- <sup>10</sup> <u>https://bwsr.state.mn.us/I2I</u>
- <sup>11</sup> <u>https://www.victoria.ca/EN/main/residents/water-sewer-stormwater/stormwater.html</u>
- <sup>12</sup> <u>https://www.portland.gov/bes/grants-incentives/clean-river-rewards-0</u>
- <sup>13</sup> <u>https://stewardshipcentrebc.ca/green-shores-home/gs-about/</u>
- <sup>14</sup> <u>https://hat.bc.ca/goodneighbours</u>

- <sup>16</sup> Portland Oregon area <u>https://backyardhabitats.org/</u>
- <sup>17</sup> <u>https://natureedmonton.wordpress.com/welcome/about-edmonton-master-naturalists/</u>

<sup>&</sup>lt;sup>15</sup> <u>https://satinflower.ca/pages/meadowmakers-2023</u>

#### Stewardship During Development and Landscaping

Stewardship and biodiversity protection opportunities are often ignored when private property is developed or landscaped. Many developers, landscapers, and landowners do not understand the value of ecosystem and biodiversity protection or that development does not have to have adverse impacts on biodiversity.

Saanich could develop a workshop or video for development applicants to watch prior to submitting an application. This would explain Saanich's rationale and objectives for biodiversity enhancement and protection, and the value of doing so, and provide examples of successful projects that have enhanced native biodiversity.

Developers could be incentivized to protect and enhance biodiversity in projects. Two possibilities are:

- 1) Initiate a Developer Environmental Steward certification program. Saanich could encourage property owners to work with certified developers. Such a program would likely need to be administered by an independent organization, with certification processes and standards developed by an external body. Certification criteria could include previous success at implementing projects that achieve stewardship objectives, with the more successful projects a developer has, the higher their certification is (e.g., gold, silver, bronze developers). This could be become one of Saanich's annual environmental awards.
- 2) A Built Green-like certification program consisting of biodiversity and ecosystem service attributes could be developed and applied at a property level. The Township of Esquimalt's Green Building Checklist, the City of Surrey's Sustainable Development Checklist, and the City of Toronto's Green Standard checklists have criteria that Saanich could adapt. Ideally, staff with environmental expertise would review proposed designs to ensure they are feasible and installed. Unfortunately, biodiversity-enhancing landscape design is often a low priority as building designs.

To ensure success of programs like these, it is also likely enhanced staff (or partner) capacity would need to be found to confirm installation and ongoing maintenance of proposed projects, and monitor their success over time and space.

Many landscapers and Master Gardener associations would benefit from enhanced education on the benefits of the use of native plant species, and better selection of ecologically- appropriate non-native species, when unavoidable. Victoria's Master Gardener Association already supports sustainable horticultural practices. Such education could tie into the above-mentioned certification programs.

#### **Staffing and Coordination**

Proactive coordination and promotion will be required to achieve enhanced stewardship in Saanich. Additional staff will likely be required to facilitate "enhanced" stewardship in the community. Currently District staff already coordinate stewardship, but focus on parks. Existing efforts may have enough volunteers, but because existing staff are already at capacity, they do not have the ability to take on more projects and volunteers.

Saanich parks staff and their Pulling Together volunteers cannot keep up with the removal of invasive species in parks, let alone fulsomely enhance and restore biodiversity across parks and non-park public

lands. Additional staffing to coordinate stewardship of park land should be seriously considered. Saanich does not have a stewardship coordinator for private land, although some staff review development proposals, in part from a stewardship perspective. Staffing to facilitate, promote, and evaluate stewardship programs focused on private property is needed for such programs to reach their potential even if community groups or neighboring homeowners provide the initiative and labor. The RSTC has previously suggested that Saanich hire such a coordinator.

Accurate and regularly updated ecosystem and biodiversity mapping are critical to develop and track metrics for stewardship and, more broadly, biodiversity. The District needs to have sufficient GIS and biodiversity inventory staffing to regularly update mapping and track metrics. It might be appropriate for the same staff to also manage an accessible database of stewardship programs (District and community-led) and biodiversity data from community science projects.

It is essential to manage, coordinate and do stewardship in a cost-effective way. Stewardship programs may need to increasingly rely on community partners to lead and manage some programs, and raise external funding. The District should assess whether some programs are best led by community partners. Regardless, the District should enthusiastically facilitate community-led initiatives.

Overall, Saanich needs to ensure there is sufficient staff capacity to improve biodiversity in parks and non-park public land, proactively develop, encourage, and incentivize stewardship programs on both public and private lands, support external stewardship organizations and initiatives, and update associated mapping and success metrics. Ultimately, the upcoming BCS should be used to determine the need for new staff and/or funding, or whether leveraging external organizations could suffice.

## Natural State Covenants are Part of an Overall Biodiversity Strategy.

## What are Natural State or Conservation Covenants?

Natural state or conservation covenants are an agreement between local government, or an NGO and a private landowner that meets defined conservation or biodiversity goals on a particular piece of property. Many reports state that covenants need to be voluntary in order to be effective.

## For example - Green Bylaws Toolkit -

https://stewardshipcentrebc.ca/PDF\_docs/GreenBylaws/GreenBylawsToolkit\_3rdEdition\_ \_2021.pdf

(page 159) – "A covenant is a voluntary agreement between the landowner and a covenant holder (a municipality, regional district, or an approved non-governmental organization). The landowner agrees to protect the land according to the wording of the covenant. The covenant holder has the right to monitor and enforce the covenant to ensure that the landowner is using the land in accordance with the covenant. Covenants "run with the land," meaning that whoever owns the land must abide by the covenant, thus ensuring that the agreed upon protection endures over the long term."

"Local governments and landowners use covenants to restrict the use of private land to activities and areas of use that respect sensitive ecosystems."

Also: BC Conservation Covenant Handbook: A Guide to Best Practices for Conservation Covenants in British Columbia, <u>https://www.wcel.org/sites/default/files/publications/bc-conservation-covenant-handbook\_2023.pdf</u>

Page 3 – "A conservation covenant is a voluntary, written agreement between a landowner and one or more covenant holders. It can cover all or part of a parcel of property and can apply year-round or only to specific periods in the year. In the agreement, the landowner promises to protect the land or features on the land in ways that are specified in the covenant. For instance, the landowner might agree to provide specific protection for important habitat or not to subdivide the land. The covenant holder holds the conservation covenant and can enforce it if the owner does not abide by its terms."

## Why are Natural State or Conservation Covenants Important?

Potentially, natural state or conservation covenants are a very useful tool for achieving biodiversity goals in Saanich. Part of the strategic approach is to maintain biodiversity in small habitat patches (stepping stones) where they exist. Covenants on private property can help with that. This could be especially the case in rural Saanich, where landowners may feel they have a nice piece of natural habitat on their property but want an incentive

and possibly technical assistance to protect it. From the standpoint of meeting biodiversity goals, it doesn't matter if pieces of sensitive or other habitats are on private or public lands, provided that some level of management and monitoring are provided.

## How are Natural State Covenants Used in Saanich?

Natural State Covenants have been used in Saanich to protect areas on private lands. They have often been required of a landowner in exchange for a development or building permit. As such these covenants are not voluntary. Property owners may feel coerced and resentful about having to covenant part of their property. Many covenanted parcels are neglected, are overgrown by invasive plants, and do not meet the goal of protecting them. In other words, a non-voluntary approach tends to be ineffective.

## What Does RSTC Recommend?

In the Biodiversity Strategy, the emphasis should be on encouraging voluntary covenants, and landowners should feel welcomed to consider covenanting a portion of their property if it has natural values or contains a fragment of a sensitive ecosystem.

## What Needs to be Done?

As a starting point, it would help to have full documentation and an assessment of the effectiveness of natural state covenants created to date in Saanich.

A program to encourage volunteers to step forward to covenant pieces of natural habitat should be created and marketed. But it may take some work to build public trust that the District can be a reliable partner in this process.

In order to properly incent a landowner, the covenanted portion of the property would be removed from the assessment area and either not taxed, or taxed at a much lower rate. The principle at play is that property taxes should not be charged for land the owners are restricted from using, and which are allocated to a public good.

The management objectives of each covenanted area should be clearly stated in the covenant agreement. An NGO such as the Habitat Acquisition Trust (HAT) could develop a site-specific management plan to be followed by the responsible party identified in the agreement. Monitoring and reporting on the state of conservation covenants would be required. The landowner would not be charged these costs.

#### **OVERARCHING CONCERNS**

**A.** Diamond Head has summarized four (4) core thematic areas where RSTC can provide input on concerns and solutions.

1. Protecting and enhancing biodiversity during land use planning and development

- 2. Protecting and enhancing biodiversity during internal municipal operations
- 3. Protecting and enhancing a network of habitat areas through private land regulation
- 4. Promoting stewardship and public education

These are all strategies to achieve goals and objectives set out in the BCS. Overarching concerns are that for the goals and objectives:

- 1. There will be no measurable targets for any of the themes above within the BCS.
- 2. There will be no timelines articulated within the BCS
- 3. There will be no funding estimates to achieve the targets within timelines

Solutions and ideas to remedy the above three concerns are to articulate within the BCS

- 1. Measurable targets. For example, both the Federal government and the provincial government have committed to conserve 30% of representative ecosystems *by 2030*. This arises from international commitments agreed upon at COP 15 in Montreal. While the BCS cannot make the commitment, it can recommend this commitment to council.
- 2. No timelines are articulated within BCS See above 30% by 2030. Another example would be that all land use planning documents (Point 1 above) and internal policy operations (Point 2 above) assess their work through the Environmental Policy filter that we have developed in the next two years. If by private land legislation you mean something like the EDPA, any recommendation should come with a timeline.
- 3. Any commitment at all at any timeline needs funding commitments. While the BCS cannot make the commitment, it can have estimates of costs and how such costs can be recouped by the municipality. A great example of this is a local conservation tax a few dollars added to all property taxes can generate a substantial dedicated fund to support private land stewardship and acquisition of key land parcels for biodiversity conservation and connectivity. A number of regional districts in BC have implemented these taxes already. A recommended timeline should be articulated in the BCS. Another potential revenue stream is a compensation fund when environmental damage of some essential infrastructure or housing upgrades cannot be mitigated.

What we do not want to see is a strategy that is just a visioning and feel good document. The time to document the importance of urban biodiversity conservation or ecosystem values is well past and we need to see a strategy that has clear targets, metrics to measure progress, a regular reporting framework and strong arguments to get council to adopt a quantitative approach to biodiversity conservation.

**B.** Definitions, indicators, and data quantifying "biodiversity" and ecosystem condition are inadequate. Definitions tend to be vague, saying everything and nothing simultaneously, they don't incorporate current scientific knowledge very well and can't be applied consistently across the disturbance gradient of an urbanizing environment. These problems impede thoughtful discussion and make deciding on appropriate actions and assessing outcomes problematic.

The BCS needs to articulate definitions and identify indicators for biodiversity and ecosystem condition in appropriate detail for the natural environment of Saanich – an urbanizing environment with many "novel" ecosystems increasingly influenced by development and climate change. Definitions and indicators should reflect up-to-date scientific knowledge; indicators should also include key ecologically and culturally important and "charismatic" species as these reflect what is important to human residents and to native flora and fauna. Appropriate indicators will vary with conservation target (e.g., different natural ecosystems, agro-ecosystems, urban forest and components of "backyard biodiversity".

Indicators should include flora and fauna especially important to First Nations. A relative abundance of those species implies relatively healthy ecosystems (under our current climate); recognition by the broader community of that importance to First Nations seems like an important step in reconciliation. Similarly, First Nations should lead in stewardship planning on District lands, especially Parks (see stewardship comments below).

**C.** The District has minimal or no process or commitment to (a) assess impacts of policies and actions and (b) make those data publicly and readily available.

Saanich must commit to (by action and resourcing) assessing the impacts of policies and actions on biodiversity and, more broadly, the natural environment and should present results of assessments on the Saanich website in a timely way.

**D**. Each of the first three questions ask about "protecting" and "enhancing". If these are the strategic ends, or outcomes, of the biodiversity strategy, then they need to be more fully described and defined. What is meant by protection? What is meant by enhancing? We cannot leave these terms to what we assume they mean, or to an individual's interpretation of what they mean.

'Protection' involves more than simply designating an area and restricting uses in it. Our parks are a good example where the internal ecosystems are not protected from either over-use by people or from being overwhelmed by invasive plants, especially invasive grasses. These impacts occur in the absence of active management of these areas and are very seriously threatening the values that the parks are meant to protect. These facts need to be recognized, and the strategy needs to call for the establishment and funding of management plans for the priority parks that will help halt or even reverse the detrimental changes that are now taking place within them.

A severe limitation is that we still do not have a good understanding of how much biodiverse area we have, where it is, and its condition. This was a failure of the State of Biodiversity Report, and before we can realistically strategize about protecting and enhancing, we need those details as well. Therefore, the first task within the strategy is to call for developing and funding a plan for collecting this information in

priority areas and ecosystems. The nature parks, lakes and watercourses in Saanich should be the priority.

#### 1. Protecting and enhancing biodiversity during land use planning and development

Concerns:

- There is inherent conflict between protecting biodiversity and developing land to provide additional housing on a fixed land base. Impacts of increased densification and concentration of the built environment on biodiversity and the natural environment of Saanich and the region have not been addressed comprehensively and wholistically in Saanich development policies.
  - Densification can impact local biodiversity and ecosystem functions by reducing amounts of permeable surfaces, changing urban hydrology, and reducing quantity and quality of above-and below-ground resources for nearby trees and other organisms. Protection of soil volumes and functions will be increasingly important for ecosystem function, mature tree health, and biodiversity as climate increasingly changes. These impacts are not adequately addressed in the permitting process.
- Natural capital and biodiversity can be overlooked in developments. Once lost, they are hard to restore. Greenspace must be maintained, enhanced, and even created.
- Inadequate staff capacity to ensure homeowners/developers are meeting their "green" commitments made via covenants or green building guidelines over the long-term.
- Commitments are often made on paper, implemented, and then not maintained
- There is inadequate mapping and inventory of biodiversity in Saanich
- There is a lack of First Nations input into planning and development
- Land use planning and development are complementary but need to be treated differently. Land use planning offers a powerful tool for protection and enhancement through public consensusbuilding, and the judicious use of zoning and land allocation policy. It determines where development is located and is critically dependent on a meaningful inventory of biodiversity and the natural environment. However, planning, in and of itself, does not directly impact biodiversity and the natural environment. Enhancement can be achieved through focused stewardship on both public and private lands. Critical planning tools affecting biodiversity include the Official Community Plan (including Development Permit Area guidelines), Zoning Bylaw, and Land Use Development Procedures Bylaw.
- Development, the physical process of developing private property and associated public infrastructure (site preparation, construction, size, design, and materials used) has tremendous potential and long-lasting impacts on biodiversity and the broader natural environment both locally and far away. Development, not planning, is what directly impacts biodiversity and ecosystem conditions and functions. Critical legislative tools include the Subdivision Bylaw, Building Bylaw, and related Zoning Bylaw.

- Impacts on biodiversity and natural environment from materials used in public infrastructure do not seem to have been assessed and incorporated into Saanich standards and purchasing decisions. Examples include (1) paving materials to minimize greenhouse gas emissions, use of "virgin" aggregate from elsewhere, and to minimize disposal of waste concrete locally (2) outdoor lighting specs to better protect native nocturnal fauna and (3) widespread incorporation of natural stormwater management to better protect soil moisture and stream ecosystems.
- Regulation of natural gas hookups. Associated impacts are about indoor air quality, communitywide GHG emissions, and impacts external to Saanich from extracting (fracking) gas.
- There is a difference in 'development' inside and outside the UCB. The minimum parcel size is 5 acres in Rural Saanich, making the impact of development different from smaller parcels inside the UCB. This difference should be reflected in the approach to each.
- The inventory of valued ecosystems and species at risk is poor in rural Saanich, making it a strategic necessity to improve it as soon as possible, and meanwhile taking a precautionary approach.

#### Ideas/solutions:

- Development regulations that ensure
  - Soil permeability to reduce watershed "flashiness" from stormwater runoff, including daylighting creeks where realistic. Saanich should limit the amount of impermeable area on any given property and should more aggressively incorporate low impact development techniques to minimize runoff as part of its public infrastructure work.
  - Protection of riparian and marine shoreline biodiversity and ecosystem services
- Consider different planning and development guidelines for within vs outside the UCB
- Properly inventory presence/absence of truly intact sensitive ecosystems and ensure their protection and enhancement with more strict regulation
- Ensure property owners are accountable for their "green" commitments
- Commit to exceeding the 30x30 COP15 commitments
- Implement a Local Conservation Fund (funded via parcel taxes) to fund biodiversity protection and enhancement on BOTH public and private lands. Funds should be available to Saanich- and externally- led projects
- Planning needs to view engineered corridors (roadways) as potential biological corridors and must incorporate better natural buffers between significant natural areas and development. Noise and unnecessary light penetrate natural areas and impact wildlife. Some of this can be addressed through the zoning bylaw. New large glassy buildings that impact nocturnal native fauna should not be allowed near natural areas.
- For actual development, Saanich should ensure its infrastructure projects (e.g., roadways) do not impact native biodiversity by becoming a vector for non-native invasive vegetation.
- Saanich should review its standards and purchasing policies for public infrastructure and commit to products that minimize greenhouse gas emissions, impacts on biodiversity and natural environment locally and from wherever raw materials are sourced and processed, and waste –

construction waste should be reused and recycled to the maximum extent possible. This should be embedded in policies.

## 2. Protecting and enhancing biodiversity during internal municipal operations

Concerns:

- While Saanich staff and volunteers are trying to maintain biodiversity in public spaces (primarily parks), there is a lack of capacity to keep up with invasives removal and biodiversity restoration
- The phrase, "internal municipal operations" is ambiguous. It can relate to internal policies for administrative functions and cross-department communications or to on-ground practices pertaining to utility and engineering work, park and greenspace management, and urban forest maintenance. Examples of on-ground park maintenance are mowing or trimming understory vegetation when least likely to impact native forbs, nesting birds, pollinators, etc. and to not drive heavy equipment on wet soils when particularly subject to compaction and destruction of soil structure.

## Ideas/solutions:

- Increase capacity so Saanich can "lead-the-way" in biodiversity protection and enhancement
  - Further enhance restoration efforts in Parks;
  - Protect and enhance biodiversity in non-park public lands (e.g. rights-of-way, boulevards, etc.) (See also comments on "promoting" stewardship).
  - Ensure funding to regularly undertake inventories and mapping of biodiversity to ensure success of any biodiversity protection/enhancement programs
- Ensure a mindset of conservation among staff. All staff should know their own importance to meeting the goals of Resilient Saanich.
  - Formally implement the RSTC's environmental policy framework matrix evaluation tool
  - Ensure good internal communications regarding Resilient Saanich, both top- down and bottom- up.
- For "internal municipal operations" the BCS should distinguish between administrative and onsite procedures.
- A visible demonstration of District commitment to protecting and enhancing biodiversity would be to redevelop the grounds of city hall with native vegetation.
- Non-native trees should be planted with prudence on public lands, taking into account possible impacts on soil, adjacent native vegetation, and habitat quality for other native fauna and their susceptibility to direct and indirect impacts of climate change. Monitoring of trees listed in the significant tree program provides a basis for evaluating the responses of different tree species to changing site conditions.

#### 3. Protecting and enhancing a network of habitat areas through private land regulation

#### Concerns:

- (Perspective 1) Previous criteria used to define EDPA protected areas were too narrowly focused on sensitive ecosystems and often applied to areas that didn't have evidence of sensitive ecosystems
- (Perspective 2) "Sensitive ecosystem" designation is a poor basis for regulation; it is an
  incomplete assessment of ecosystem components based almost entirely on presence of certain
  perennial native vegetation and cannot be applied consistently in an urban area. The presence of
  desired native vegetation doesn't guarantee that soil at all resembles that of a "native" soil in
  form and function; similarly, viable propagules of desired vegetation may be underground and
  not visible above-ground, but it doesn't mean that "there is no sign of a sensitive ecosystem" as
  some conclude. They may just need appropriate conditions to emerge. Our classifications are
  biased by what we see when we happen to look. For regulations, Saanich may need to rely on
  some combination of meaningful protection of mature native trees, minimizing impermeable
  surfaces, and other approaches.
- Protecting and enhancing a network of habitat areas through private land regulation is a bit misleading. Within the Urban Containment Boundary, public road boulevards and rights of way provide much habitat connectivity. Private property is only part of the story and regulation is not the sole approach for protecting private land biodiversity.

#### Ideas/solutions:

- Prioritize hub/spoke biodiversity protection/enhancement
- Identify the entire District as an EDPA, with enhanced protection outside the UCB where biodiversity is in better condition vs areas in the UCB
  - Well defined isolated features (large trees, wetlands, riparian, species of concern, etc.) that have value in themselves or for restoration could be the trigger for an assessment (that would not have to be underwritten by the land owner).
  - Criteria for any limitations imposed by the future EDPA must be clearly defined, rationalized and supported by science
  - Development applications should be reviewed expeditiously- this will likely require enhanced Saanich staff capacity)
- Refer to the Wildlife District Ordinance for the City of Los Angeles (approved by Council committees, awaiting approval by full LA Council) for approaches to regulate development in a contiguous region of Los Angeles designated as critical wildlife habitat. The proposed ordinance is based on extensive and recent research (lacking in Saanich) and is being applied in a US location with high land prices and incentive to develop (as in Saanich), where property rights are considered sacrosanct (less so in Saanich but still very much an issue). Determine if approaches taken in Los Angeles can be applied here and avoid some problems of the previous EDPA.

- Strengthen the protections around mature native trees on private property; meaningfully
  enforce protections against removal and provide ongoing reports about what mature trees are
  being lost on private property and why. The municipal attitude should be to allow mature native
  tree removal only as an absolute last resort. From the outside, the current municipal approach
  seems to be readily permit removal of any mature native tree that could possibly interfere with a
  proposed development and then try to find some place they can "replace" the removed trees.
  That attitude must change.
- Saanich should reduce the maximum footprints of buildings, put ecologically meaningful limits on the proportion of private properties which can be covered by impermeable surfaces and bring in standards to minimize damaging effects of outdoor lighting and reduce the impacts of inappropriate windows on birds.

#### 4. Promoting stewardship and public education

Concerns:

- First Nations stewardship desires (I.e., species, methodologies and target locations) need to be a higher priority in stewardship of District lands
- "Promoting" stewardship and public education implies a marketing campaign. Instead, the question should be about how to "encourage" and support" stewardship. "Education initiatives" are meaningless if the District doesn't set a good example on public lands.
- Saanich does a poor job "stewarding" parks and boulevards/rights-of-way. It also does not
  encourage the local community to steward public lands in their own areas. The District likes to
  point out how many volunteer hours are contributed via Pulling Together but can't or won't
  acknowledge how much parkland has been "restored" or put it in the context of how much
  remains to be "restored". In other words, the District confuses reporting with marketing.

#### Ideas/Solutions:

- Refer to the stewardship brief prepared by RSTC for a discussion of some stewardship issues we think are important and associated recommendations.
- In general, as with other "themes" described here, Saanich needs to (a) have meaningful
  indicators of biodiversity; (b) monitor the effects of policies and actions as per those indicators;
  and (c) regularly and publicly report progress using those indicators, preferably via the Saanich
  website.
- Stewardship must have active community involvement to be meaningful. Saanich needs to "up its game" on rehabilitating/restoring native ecosystems on Park lands, utilizing volunteers (Pulling Together) as much as possible and staff where required. Progress should be monitored and reported regularly.
- First Nations should be <u>invited</u> to take a <u>leadership</u> role stewarding of District lands, particularly parks. That would help tie together our stated desire for healthy ecosystems, sustainability, reconciliation, etc.

- Saanich needs to support and encourage community-driven stewardship initiatives on public lands, not necessarily assume a dominant and leading role. Initiatives can cover a wide range of activities and "support" can range from enthusiastic facilitation to in-kind support or funding support. There are many stewardship actions, even involving District land, that can be done more quickly and effectively by motivated community members than by the District. NGOs, supported by the District, can often access funds that the District itself cannot. Actions and appropriate partnership models need to be determined in consultation with community groups and then built into policy and appropriately resourced. Examples include community science initiatives and small-scale stewardship on neighborhood rights of way and boulevards.
- Naturalizing private properties was a goal of Naturescape and promoted by Saanich but it seems to have withered away. An alternative is the Friends of Backyard Habitat program in the Portland Oregon area- led by the community but supported by local governments. They have a certification program, minimal costs to participate, an active engaged membership that doesn't require government direction, just appropriate support. And they seem to know how to publicize their program. A similar approach might be more attractive to the broader community than something seen to be driven by the District.
- The District already provides some financial incentive for stewardship on private land via the Significant Tree Program. That program has withered over the past few years due to lack of promotion and interest by the District. It should be expanded, re-energized and handed over to the community to lead, as originally intended. The District needs to provide administrative support and continue to fund the proactive maintenance grants program but leadership and promotion should be in the hands of the community.

#### Questions that were not asked:

#### What do I want to see included in the Biodiversity Conservation Strategy?

- A commitment and funding for inventorying, mapping and rehabilitating ecosystems in our parks over a ten-year time frame, and a call for developing a plan with staff and resources to accomplish that.
- A new emphasis and focus on voluntary stewardship to promote backyard biodiversity in Saanich and a plan for a staffed program for accomplishing that, including incentives and supports to the public.
- A call for a comprehensive staffed and funded program for managing species at risk in Saanich including in Rural Saanich

- Strategies laid out for providing protection and enhancement of the eight conservation targets identified by the RSTC Biodiversity Working Group. These of course can be consistent with strategies and plans for parks, aquatic systems, and backyards.
- A strategy implementation plan with a proposed timetable and budget requirements.

#### Are there any concerns with the GIN (Green Infrastructure Network)?

- There still needs to be a clear illustration that there is good science backing the concept of corridor networks and connectivity. This concept seems to be at the core of DHC's strategic approach. We need to be clear which species are likely to be favoured by such networks, and whether that's what we want. The real priority needs to be on the hubs, which are the large nature parks. If the hubs are not in good ecological condition, then the corridors will not be either.
  - For example, a network may favour highly mobile species, many of which are non-native, and not benefit sessile or more slowly spreading native species. Do we want the corridor and network approach if it just promotes the movement of deer, Norway and black rats, grey squirrels, feral cats, cotton-tail bunnies and raccoons? What native species benefit? Let's see some evidence.
  - What about mobile plants? Right now, it seems like all the really mobile species are nonnative: Queen Ann's lace, Canada thistle, hairy cat's ear, English ivy, sheep sorrel, orchard and sweet vernal grass, etc, etc. Are these what corridors promote? What native plant species will move along the corridors and benefit from connectivity? Dull Oregon grape? Twisted stalk? Vanilla leaf? Let's see a list.
- The alternative to the network approach is to simply focus on the hubs. They need a full inventory and condition assessment, and the development of management plans and funding of their implementation. This should be a much higher strategic priority than regulating private lands to 'force' the creation of a network, or corridors.
- When conceptualizing hubs, we need to also consider the lakes: Elk and Beaver, as well as
  Prospect Lake. Maltby Lake, Swan Lake, Blenkinsop Lake, and the large seasonal wetlands near
  Viaduct Rd, Panama Flats and along Todd Creek. These are hubs of aquatic biodiversity and need
  protection and enhancement strategies as well. Biodiversity in these is being lost to
  eutrophication, habitat degradation, invasive species, and water quality issues. There are also
  problems with exotics in our waters; losing carp in Elk Lake, for example, would help improve
  water quality conditions. Smallmouth bass are also introduced. American bullfrogs need to be
  removed.
  - An aquatics condition assessment is required. This exists for the Colquitz River but is now dated. A good recent report on the conditions in Elk and Beaver Lake is very welcome. Similar reports on the condition of other lakes and wetlands are needed to serve as a baseline when rehabilitation efforts are started. Aquatic rehabilitation is difficult because the problems are often out of sight and gradual improvements are hard to track. But aquatic biodiversity is every bit as important as terrestrial biodiversity.

## Date Motions from Minutes

MOVED by J. Gye and Seconded by B. Wilkes, "That the Resilient Saanich Technical Committee reco	ommend	
13-Aug-20 that staff provide the committee with a gap analysis to be presented at the next meeting."	Carrie	ed staff
MOVED by S. Guy and Seconded by T. Stevens, "That the Resilient Saanich Technical Committee re-		
that staff compile sample goals and objectives from other documents to provide to the committee 13-Aug-20 next meeting."		ed staff
MOVED by P. Govindarajulu and Seconded by T. Ennis, "That it be recommended that the Resilient	Carrie Saanich	a stan
Technical Committee hold a full day Saturday workshop in September to be supported by an indep		
facilitator with the intended outcomes of preparing draft goals and objectives and refining the com		
13-Aug-20 work plan."	Carrie	ed done
MOVED by J. Gye and Seconded by P. Govindarajulu, "That the Resilient Saanich Technical Commit	tee	
recommend that Councillor Mersereau work with staff to explore technological tools to support th		
13-Aug-20 committee work.	Carrie	ed staff
9-Sep-20		
MOVED by K. Brown and Seconded by P. Govindarajulu, "To request feedback from Saanich Divisio		
Departments on the draft goals, objectives, and principles developed by the Resilient Saanich Tech		
Committee, including, but not limited to, the Environmental Services division, the Sustainability div Current Planning and Community Planning divisions. Engineering and Public Works, and the Parks a		
Recreations department. The draft is to be received by staff on the 12th and returned with comme		
27-Oct-20 RSTC by the 19th."	Carrie	ed staff
MOVED by T. Ennis and Seconded by S. Guy "That there be a mapping presentation by staff before		
24-Nov-20 18th."	Carrie	ed staff
8-Dec-20		
Jan-21		
16-Feb-21		
18-Mar-21		
MOVED by B. Wilkes and Seconded by T. Stevens: "That the committee approve the Resilient Saani		
Technical Committee Living Work Plan for the Environmental Policy Framework, as amended, subjent 15-Apr-21 revision at the call of the Chair."	ect to Carrie	ed RSTC
MOVED by J. Gye and Seconded by B. Wilkes: "That once staff have completed the gap analysis bet		eu KSTC
Terms of Reference and draft Work Plan, the gap analysis will be provided to the committee for ing		
15-Apr-21 it being presented to Council."	Carrie	ed staff
	541116	

15 Arr 24	MOVED by J. Gye and Seconded by K. Brown: "That the committee receive for information the draft policy	Consideral	DCTC
15-Apr-21	evaluation tool, version 3 submitted on April 15, 2021.	Carried	RSTC
	MOVED by B. Windjack and Seconded by T. Ennis: "That Milestone 1 action, "Further refine the scope of the		
	Environmental Policy Framework and data collection" is ongoing and to date has included the addition of: 🛛		
	EPF Thematic Plans to the December 2020 framework document; 🛙 An updated April 2021 EPF Milestone		
15-Apr-21	Work Plan; and 🛛 The new Mapping Working Group's advice on refinement of data gaps and collection."	Carried	done
	MOVED by T. Stevens and Seconded by P. Govindarajulu: "That feedback be requested from committee		
27-Apr-21	members and staff by May 7th on the approach proposed by the Biodiversity Working Group."	Carried	done
	MOVED by B. Windjack and Seconded by T. Stevens: "That the Resilient Saanich Technical Committee (RSTC) recommend that Council direct staff to proceed with: 1. A preliminary state of biodiversity report to be completed by the Environmental GIS Analyst staff using existing data; 2. Analysis of data is left to be considered by the consultant hired to develop the Biodiversity Conservation Strategy; 3. The RSTC approve		
	the dataset recommendations in Table 1 which would be actioned by the Environmental GIS Analyst; and 4.		Replaced with following
25_May_21	The RSTC consider if any data gaps or research should occur in advance of the consultant work to complete the Biodiversity Conservation Strategy for Council consideration as per Action 11.	Defeated	•
ZJ-IVIdy-ZI	MOVED by B. Wilkes and Seconded by T. Stevens: "That an additional meeting be held within the next 10 days	Deleateu	motion
25-May-21	to receive a presentation on the Conservation Measures Partnership."	Carried	done
25-May-21	MOVED by T. Ennis and Seconded by T. Stevens: "That the Resilient Saanich Technical Committee endorse the development of a proposed fact sheet/background document as developed by Kevin Brown and which will be reviewed by the Biodiversity Working Group for feedback."	Carried	RSTC
	MOVED by T. Stevens and Seconded by K. Brown: "That the committee endorse that: 1. The draft goals and objectives be edited to clarify terminology and to flesh out the goals and objectives to be "SMART" (Specific, Measureable, Achievable, Relevant and Time-Bound); 2. Supportive funding be made available to retain a First Nations representative to provide feedback on the draft. a) That a consultant take the results of the engagement process and return with a revised draft of the vision, principles, goals and objectives for the consideration of the RSTC; 3. The results of the inclusivity and preferences questions be used to guide future engagement as part of Resilient Saanich (such as adding cultural groups to the lists of targeted stakeholders); 4. Staff continue efforts to engage First Nations for more in-depth stakeholder engagement for the future		
25-May-21	phases."	Carried	staff and RSTC

MOVED by J. Gye and Seconded by T. Stevens: "That T. Ennis provide a case study for the committee to 17-Jun-21 review at a future meeting." MOVED by T. Stevens and Seconded by B. Wilkes: "That staff be requested to review the Draft Workplan a	Carried nd	done
17-Jun-21 Terms of Reference and provide feedback to the RSTC in a week or more." MOVED by T. Stevens and Seconded by K. Brown: "That the draft Terms of Reference be amended to add "community representative with a stewardship background" be solicited for the renewed and expanded	Carried	done
29-Jun-21 Technical Committee."	Carried	done
MOVED by T. Stevens and Seconded by P. Govindarajulu: "That the Terms of Reference be amended to ref 29-Jun-21 the changes as discussed and then provided to staff for inclusion in the package for Council."	Carried	done
MOVED by B. Wilkes and Seconded by B. Windjack: "That the RSTC receive the report from the Mapping 29-Jun-21 Working Group and direct the group to arrange a meeting with staff to discuss how to move forward." MOVED by B. Windjack and Seconded by J. Gye: "That the RSTC adopt the conservation standards as supported by the Miradi Software to develop the State of Biodiversity Report and the subsequent Biodiver	Carried	RSTC and staff
6-Jul-21 Conservation Strategy." MOVED by J. Gye and Seconded by B. Wilkes: "That the RSTC direct staff to draft the Terms of Reference for consultant with experience in the Conservation Measures Partnership methodologies for the State of	Carried	done
6-Jul-21 Biodiversity Report."	Carried	done
MOVED by PG and Seconded by J. Gye: "That the RSTC support the Resilient Saanich Progress Report, with 6-Jul-21 revisions as discussed, and the report be forwarded to the July 19, 2021 Saanich Council meeting."	Carried	done
MOVED by T. Ennis and Seconded by K, Brown: "That the draft Resilient Saanich Terms of Reference be 20-Jul-21 approved, in principle, and that it be referred to the August 9, 2021 Council meeting." MOVED by B. Wilkes and Seconded by J. Gye: "That the Mapping Working Group recommends that the RS	Carried TC	done
20-Jul-21 not endorse release of edition 4 of the Environmental Reference Atlas." MOVED by T. Ennis and Seconded by B. Wilkes: "That the RSTC approve that staff move forward with the Request for Proposal process to have one contract with a team approach for the Secretariat, the Conserva Measures Study, the State of Biodiversity Report and the Biodiversity Conservation Strategy; that Tim Enni assist staff with improving the Terms of Reference; and that staff subsequently carry on with the Request for	s	done
17-Aug-21 Proposal process." MOVED by B. Wilkes and Seconded by S. Guy: "That it be recommended that the Resilient Saanich Technic	Carried al	done
16-Sep-21 Committee request staff prepare definitions and receive the committee's comments."	Carried	staff

MOVED by B. Windjack and Seconded by C. Lowe: "That it be recommended that the Resilient Saanich Technical Committee request staff review the Biodiversity Brief with attention to where and how the information could most effectively be used and presented in addition to review of the technical information		ctoff
16-Sep-21 and to report back to the RSTC by the November 2021 meeting."	Carried	staff
MOVED by C. Lowe and Seconded by J. Gye: "That it be recommended that the Resilient Saanich Technical Committee direct staff to present Council with a request for funding in 2022 to complete mapping of Saanich's marine shoreline, using the same methodology as the recent marine shoreline mapping 26-Oct-21 commissioned by the Capital Regional District for the Gorge Waterway and other selected coastal areas."	Carried	staff
MOVED by S. Guy and Seconded by P. Govindarajulu: "That the Resilient Saanich Technical Committee endorse the proposed changes to the Terms of Reference for Milestones 2 and 3 Consultant Team with an edit to page 2 as follows: "Resilient Saanich will include the Climate Plan (2020), a Biodiversity Conservation 26-Oct-21 Strategy, an enhanced stewardship program and other coordinated policies and programs."	Carried	done
23-Nov-21	curricu	uone
11-Dec-21		
16-Dec-21		
MOVED by T. Ennis and Seconded by B. Wilkes: "That the Resilient Saanich Technical Committee recomment that the Terrestrial Ecosystem Mapping be updated outside the Urban Containment Boundary (UCB), and parks and other lands that have natural or near natural areas within the UCB, using at least 50-75% level of 25-Jan-22 ground-truthing recommended to achieve municipal planning and environmental protection objectives." MOVED by T. Stevens and seconded by S. Guy: "That the Resilient Saanich Technical Committee recommend that the contract be split into two: The first piece being the state of biodiversity report with a recommendation that Conservation Standards be used as the first choice (but open to other methodologies and the second contract, which can be led simultaneously, includes the project coordination and development of the biodiversity conservation strategy which will build on the state of biodiversity report ar	Tabled ds ),	
22-Feb-22 the methodology used. MOVED by B. Wilkes and Seconded by J. Gye: "That the Resilient Saanich Technical Committee endorse the findings of the Mapping Working Group in the March 28, 2022 briefing notes and refer it to Staff and the	Carried	done
29-Mar-22 Biodiversity consultants for action."	Carried	staff

26-Apr-22	Main Motion, as Amended: "That the Resilient Saanich Technical Committee receive the briefing note on Marine Shoreline Development Permit Areas dated April 19, 2022 and refer it to Diamond Head Consultants for information.	Carried	done
24-May-22	MOVED by C. Lowe and Seconded by S. Guy: "That the Resilient Saanich Technical Committee recommends that Saanich staff work with Resilient Saanich Technical Committee representatives to develop a business case for a new dedicated enhanced private and non-park-public land stewardship coordinator staff position in anticipation of the 2023 Saanich budget planning process." Main Motion as Amended: "That the Resilient Saanich Technical Committee (RSTC) recommends that Saanich staff work with RSTC representatives to develop a business case for a new dedicated enhanced private and non-park-public land stewardship staff position in anticipation of the 2023 Saanich budget planning process	Carried	see below
24-May-22	and to be ready to respond rapidly to recommendations anticipated in the upcoming Biodiversity Conservation Strategy."	Carried	staff
24-May-22	MOVED by T. Stevens and Seconded by K. Brown: "That the Resilient Saanich Technical Committee (RSTC) recommends that the District of Saanich hire a third party consultant to work with the RSTC in writing its Environmental Policy Framework recommendations and enhanced stewardship report."	Tabled	
28-Jun-22	MOVED by S. Guy and Seconded by J. Gye: "That the Resilient Saanich Technical Committee hold a workshop with external experts."	Carried	invitation to add comments to on- line map
28-Jun-22	MOVED by J. Gye and Seconded by K. Brown: "That the Milestone 3 workplan be approved, with the addition of a line item for completing the gap analysis on the Environmental Policy Framework." MOVED by B. Wilkes and Seconded by J. Gye: "That the District of Saanich hire a Secretariat for the Resilient	Carried	staff
28-Jun-22	Saanich Technical Committee."	Carried	done
28-Jun-22 30-Aug-22	MOVED by C. Lowe and Seconded by B. Wilkes: "That the Resilient Saanich Technical Committee send the draft principles and goals of the Environmental Policy Framework to staff for a presentation to Council."	Carried	done
15-Sep-22 20-Oct-22			

- 17-Nov-22
- 15-Dec-22

19-Jan-23
16-Feb-23
MOVED by B. Wilkes and Seconded by K. Brown: "That the Resilient Saanich Technical Committee forward the observations as confirmed by committee consensus during the March 9, 2023 meeting to Council for
9-Mar-23 consideration with the Draft State of Biodiversity Report." Carried done Apr-23
May-23
MOVED by B. Wilkes and Seconded by J. Gye: "That the environmental policy framework principles be
Jun-23 accepted with the amendment to #3 as discussed." Carried RSTC-done

## Notes for an updated Environmental Policy Gap Analysis (EPGA2.0) Kevin Brown 10 August 2023 for RSTC 17 August 2023

#### Attachments: 2

At the June 2023 RSTC meeting, I discussed possible updates intended to make the existing draft EPGA (EPGA2020) more functional in (1) assessing the breadth of Saanich policies related to the natural environment (2) guiding development of new policies.

This note updates what I presented at the June meeting. Attached, for background, are two summaries (one shorter than the other) of what I saw as shortcomings of EPGA2020 and possible improvements (circulated to the EPF WG for comment in early June). I prepared a more detailed proposal and rationale in July 2023 which I can circulate separately.

For the August meeting, I would like to discuss the following:

- 1. Does this reasonably show the breadth of natural environment in a Saanich context?
- 2. Is this a reasonable categorization of stressors/threats in the context of municipal approaches?
- 3. Is this a reasonable approach for linking policies with environment and/or stressors/threats?

At the June meeting, a request was made to have detailed updates available by September 2023.

I hope to discuss these proposed updates at the August RSTC meeting, incorporate necessary revisions prior to the September 2023 RSTC meeting, and then obtain RSTC endorsement of the updated approach at the September 2023 meeting.

#### Updates:

- 1. Components of natural environment (**Table 1**) show both abiotic environment and biodiversity/ ecosystems to reflect the importance of abiotic environment quality directly to both public health and biodiversity/ecosystems. The rationale is developed in earlier briefs and the more detailed proposal referred to above.
- 2. The components of natural environment are intended to (a) be detailed enough to facilitate linking to stressors/threats and policies but not so specific as to be overwhelming (b) be reasonably consistent with the State of Biodiversity and State of Urban Forest reports and associated strategies in development and (c) reflect the development/disturbance gradient and novel ecosystems characteristic of an urbanizing landscape.
- Stressors/threats (Tables 2a, 2b, 2c) focus on <u>potential</u> proximate threats rather than more "global" threats. Global threats are clearly important and should be acknowledged in EPGA2.0; there are several possible approaches. Stressor/threats for coastal ecosystems are not yet added.
- 4. A list of Saanich polices (bylaws, Council policies, other strategic documents) was compiled from the District website, cleaned up and sorted for analysis (partial worksheet shown in **Table 3**).
- 5. Numeric codes were assigned to components of environment and to stressor/threats to facilitate linking of those with policies. Each has potential advantages for linking to policy, but there are fewer categories of environment than of proximate stressor/threats. At this point, am linking policies to environment rather than to stressor/threats.

- 6. Policies were reviewed to see if keywords or phrases related to components of environment appeared or were clearly inferred; if so, codes were added to each policy. The worksheet was then sorted by component of environment.
- 7. At first cut, we can see how many policies mention and might affect individual components of Saanich's environment (Figure 1). This doesn't yet indicate whether a policy benefits or impacts a given component of environment or how meaningful it is. Reasonable next steps are to (a) compile that information from relevant polices (b) add appropriate summaries and filtering abilities to the worksheet and (c) identify the best indicators of policy effects on either environment or stressor/threats.
- 8. Documenting which policies benefit or negatively impact components of environment and how can help flag conflicting policies. Other categories could be added for sorting and filtering, for example, the responsible department.
- 9. In summary, the EPGA revisions can make the EPGA a more useful and dynamic tool to better ensure the District protects and enhances the natural environment. Ideally the tool would ultimately be available for download and public use from the Saanich website.

	Env. Component 1	Env. Component 2	Code
Abiotic	Air quality		1
	Air temperature		2
	Light		3
	Sound		4
	Water	Freshwater	5
		Groundwater	5
		Saltwater	5
	Soil	Native	6
		Urban	6
Ecosystems	Terrestrial	Native (categorize by	7
(biotic+abiotic)		ecosystems, species?)	
		Agricultural	8
		Urban forest	9
		Urban "backyard", ROW	10
	Freshwater	Lakes, streams, permanent	11
		and ephemeral wetlands	
	Saltwater/estuary	Coastal sand, marine	12
		shoreline, near-shore	

Table 1. Components of natural environment. "Env Component 2" refers to sub-categories of "Env Component 1". Codes are assigned for sorting (see Table 3)
Environment	Stressors/Threats	Source of threat		
Air	Pollutants <sup>1</sup>	Combustion, traffic, soil disturbance		
Air temperature	Extreme temperatures	increased pavement; dark surfaces, heat transfer from buildings; loss of tree cover		
Light	ALAN <sup>2</sup>	stationary outdoor light; visible indoor lighting; mobile light (traffic)		
Sound	Noise <sup>3</sup>	industry, traffic, human activity, exacerbated by increased hard surface, reduced rough surfaces (vegetation)		
Water-fresh surface	Pollutants <sup>4</sup> stormwater and fertilizer rund chemical spills, sewage and a waste, soil erosion			
	Extreme temperature, low O2 Lack of riparian tree cover excess, low flow			
	Extreme variation in quantity	Increased Impermeable surfaces, below-ground construction		
Groundwater	Pollutants <sup>5</sup>	chemical spills, landfill leachate, sewage and animal waste		
	Salinity	Excessive depletion, saltwater intrusion		
	Disruption of flow	Disrupted replenishment		
Saltwater	Pollutants <sup>6</sup>	stormwater runoff, sewage outflow non-point pollution sources		
Soil (native and urban)	Reduced fertility, permeability, soil biodiversity	Loss of topsoil, organic matter; soil sealing and compaction; invasive non-native plants and soil biota		
	Pollutants <sup>7</sup>	Intentional (e.g., biosolids; pesticides) and accidental (chemical spills) application of chemical contaminants; localized domestic animal deposits		

Table 2a. Stressors and threats (to conditions appropriate for life), abiotic environment

1/ includes particulate matter (PM), nano and microplastics; inorganic gases (e.g., O<sub>3</sub>, NOx, SOx, CO, NH3), volatile organic compounds (VOCs), persistent organic pollutants, and heavy metals, e.g., mercury 2/ Artificial light at night

3/ human-made sound that alters the behaviour of animals and interferes with their functioning 4/ includes point (industrial or storm sewer outfalls; nano- and microplastics, metals) and non-point (leachate from septic fields, runoff of excess fertilizers including manure, pesticides; oil and hydrocarbon leaks from buried oil, gasoline tanks)

5/ includes point and non-point pollutants, e.g., fertilizer leachate (e.g., NO3), chemical and biological contamination from sewage or manures, hydrocarbon or other chemical leaks from storage tanks or pipelines 6/includes point and non-point pollutants as for fresh and groundwater

7/includes point and non-point pollutants as for groundwater; chemical contaminants (e.g., heavy metals, nanoand microplastics, other emerging chemicals of concern

Table 2b. Stressors/Threats, terrestrial ecosystems

Environment	Stressors/Threats	Source of Threat			
Ecosystem- native terrestrial	Loss of area	land use conversion (native ecosysten to other); amount, placement, design materials used in built environment (incl. roads, buildings); access via trail litter, dumping of trash, organic waste contaminated soil; lack of disturbance (fire); collision w/ traffic			
	Fragmentation				
	Pollutants				
	Reduced soil quality				
	Disrupted moisture availability				
	ALAN, Noise				
	Invasive species				
	Direct disturbance, humans and pet dogs				
Agricultural	Reduced soil quantity, quality	land use conversion to more intensive agriculture or built environment; inappropriate cultivation, drainage; fertilization; pesticide application;			
	Reduced soil fertility, organic matter				
	Loss of habitat for native birds, insects including pollinators				
Urban forest	Mature tree decline, mortality, removal	land use change - loss of pervious surface; poor microsite and soil management; introduction of pests; inappropriate species			
	Inadequate tree replacement				
	Insufficient soil volume				
	Poor soil quality				
	Disrupted hydrology				
	Introduced disease, insects				
Urban backyard/ROW	Loss of area	densification and impervious surfaces, introduction of invasive species; application of chemical fertilizers, pesticides			
	Loss of native vegetation				
	ALAN, Noise				
	Reduced soil quality, quantity				
	Pollutants <sup>7</sup>				

Freshwater-surface	Disrupted surface, subsurface flow	
	Disrupted channel morphology	
	Pollutants	
	Extreme temperature, O2	
	Extreme flow variation	
	Excessive nutrient inputs	
	Cyanophyta blooms	
	Invasive plants and animals	
	Loss of riparian overstory	
Saltwater/estuary		
Near-shore		
Coastal Sand/Marine		
<mark>Shoreline</mark>		

Table 2c. Stressors/Threats, freshwater and saltwater ecosystems

Policy	
Animals Bylaw [PDF - 124 KB]/Other	В
Blasting Bylaw [PDF - 115 KB]/Other	В
Boulevard Regulation Bylaw [PDF - 292 KB]/Other	В
Building Bylaw [PDF - 318 KB]/Other	В
Checkout Bag Regulation Bylaw [PDF - 233 KB]/Other	В
Deposit and Removal of Soil Bylaw [PDF - 172 KB]/Other	В
Development Cost Charges Bylaw [PDF - 1 MB]/Other	В
Development Cost Charges Reduction Bylaw [PDF - 216 KB]/Other	В
Driveway Access Bylaw [PDF - 98 KB]/Other	В
Firearms & Bow Discharge Regulation Bylaw [PDF 263 KB]/	В
Fireworks Regulation Bylaw [PDF - 76 KB]/Other	В
Garbage Collection & Disposal Bylaw [PDF - 180 KB]/Other	В
Land Use & Development Application Fee Bylaw [PDF - 95 KB]/Other	В
Land Use & Development Procedures Bylaw [PDF - 102 KB]/Other	В
Minimum Property Maintenance Standards Bylaw [PDF - 33 KB]	В
Noise Suppression Bylaw [PDF - 151 KB]/Other	В
Noxious Weeds Bylaw [PDF - 133 KB]/Other	В
Nuisance Bylaw [PDF - 71 KB]/Other	В
Official Community Plan Bylaw [PDF - 10 MB]/Other	В
Oil Burning Equipment and Flammable Liquid and Combustible Bylaw/Other	В
Parks Management and Control Bylaw [PDF - 249 KB]/Other	В
Pesticide Bylaw [PDF - 516 KB]/Other	В
Sanitary Sewer Bylaw [PDF - 128 KB]/Other	В
Sewer Water and Storm Drainage Connection Fee Bylaw [147KB]	В
Streets & Traffic Bylaw [PDF - 374 KB] Bylaw	В
Subdivision Bylaw [PDF - 550 KB]/Other	В
Tree Protection Bylaw, 2014 and amendments No. 9548,9781	В
Truck Route Bylaw [PDF - 103 KB]/Other	В
Unsightly Premises Bylaw [PDF - 219 KB]/Other	В
Water Utility Bylaw [PDF - 112 KB]/Other	В
Watercourse & Drainage Bylaw [PDF - 190 KB]/Other	В
Zoning Bylaw 8200 [PDF - 14 MB]/Other*	В

No.

Year

clear intent/mentioned

#### Table 3. Partial worksheet for sorting policies by environmental code

Figure 1. Saanich policies which reference or imply different components of the natural environment. Abbreviations: AQ, air quality; AT, air temperature; L, light; N/S, noise/sound; H2O, water (surface or ground, fresh or salt); TE, native terrestrial ecosystem; AgE, agricultural ecosystem; UF, urban forest; BYE, "backyard" environment; FrE, freshwater ecosystem; MES, marine, estuarine, shoreline ecosystems



#### Attachment 1.

Draft Recommendations - Revisions to Environmental Policy Gap Analysis (for June 2023 RSTC meeting)

#### Introduction

General goal of the EPGA:

Determine how Saanich policies address the components and processes of biodiversity and ecosystems in a Saanich landscape that ranges from rural and relatively natural to heavily urbanized.

For example, do existing policies adequately protect or do they impact the natural environment? Are there components of the natural environment not addressed by policy?

#### Specific goals:

- Appropriately define the breadth and components of Saanich's natural environment
- Identify stressors or threats impacting those components of environment
- Link existing Saanich policies related to components of environment and / or to threats and stressors

#### (Possible) Revisions to the existing draft (September 2020) EPGA:

- Table 1 Delete "human benefits" column; recognize in EPGA introduction interrelationships among human impacts on (a) abiotic environment (b) biodiversity/natural ecosystems and (c) human health and wellness
- 2. Table 1- Revise "natural assets" classes to better reflect item #1, be more hierarchical, better align with the SOB report, and link via stressors to policies/regulations/etc. Add farmland and "backyard biodiversity" (SOB) to acknowledge that biodiversity and ecosystems occur and differ across a disturbance/urbanization gradient.
- 3. Table 1- Update the list of stressors potentially associated with different components of environment. Distinguish between those potentially controllable by the municipality versus not directly controllable.
- Assign numeric codes to components of environment or to associated stressors and assign the same codes to policy tools to facilitate sorting of policies by environmental component and / or stressors.
- Table 3- Note (a) limitations inherent in the "assessments" of existing policies (b) uncertainty in knowing the intent (especially for regulations) and (c) what "adequate" or "room for improvement" means with respect to protecting the natural environment.
- 6. Table 4. Align with stewardship WG findings.
- 7. Table 5. Amend to account for changes to Tables 1,3,4,5

#### Attachment 2.

### Possible revisions to the draft Environmental Policy Gap Analysis (EPGA) Kevin Brown 06June 2023

The EPGA:

- is a key component of the Environmental Policy Framework (EPF)
- catalogues existing <u>and</u> emerging environmental concerns and related existing municipal policies.
- should provide a common understanding of the natural environment in Saanich's urbanized landscape and
- should be a useful tool for the community and District to develop appropriate and effective environmental policies

The EPGA should:

- 1. broadly define natural environment and divide it into components appropriate in a Saanich context
- 2. list existing and emerging threats to those components of natural environment
- 3. (a) Identify and assess existing Saanich policies meant to protect the natural environment and(b) identify aspects of Saanich's natural environment not currently addressed by policy.

The EPGA could also be used to guide environmental assessments of other ("non-environmental") Saanich policies.

Proposal: RSTC revisit the organization of Tables 1-5 in the draft EPGA and revise to increase functionality of the EPGA. Include the revised EPGA as an appendix in the RSTC's Environmental Policy Framework report.

#### Background

#### Existing EPGA draft

The existing draft EPGA was prepared by staff and first presented to RSTC in Sept 2020 for review. From the draft EPGA:

As part of Milestone One, taking stock of the existing policy framework and identifying gaps is an important first step in the [EPF] process. The Terms of Reference action item deliverable is to: "Draft a Resilient Saanich framework skeleton of existing policies, etc. Conduct a gap analysis. Identify options for filling gaps using the Green Bylaws Toolkit and other references".

The intent was to answer three questions largely as milestone 1 actions:

- 1. What natural assets are there and what risks do they face?
- 2. How do we currently enhance and protect our natural assets?
- 3. What do we have the authority or opportunity to do?

A complete EPGA would then be used to guide the setting of EPF goals and objectives and determine related actions necessary to completing the EPF.

The draft EPGA notes that "this document will continually be revised throughout the process", implying the EPF process.

The existing draft EPGA consists of several tables:

- 1. "Natural assets", their "benefits", and "threats"
- 2. Overview of Saanich bylaws, policies, strategies, procedures, and programs and partnerships (that contain provisions for environmental protection)
- Related Saanich bylaws overview and "status" (e.g., "is there a gap or room for improvement?"). Assessments are summarized as a. "Significantly out-of-date or missing key elements" b. "Room for improvement or at least a review" c. "Complete and up-to-date" d. "Unknown or lack of data"
- 4. Stewardship approaches- list some current (2020) approaches by (a) the District and (b) community-based (non-governmental) organizations
- 5. Gap analysis summary and next steps lists "natural assets" as per Table 1; summary status of plans and policies, stewardship status as in Table 3; and comments that appear to relate to analysis embedded in individual cells of the matrix.

#### Past review by RSTC

We briefly reviewed the draft EPGA in late 2020. We had difficulty refining the "natural assets" category, did not discuss specific "threats", and were not keen to pore over the many Saanich policy tools. At the time, RSTC was new and still resolving what it should be doing and how. RSTC did not answer two key questions: (a) is the draft EPGA adequate to do what is intended? (b) how can we improve the EPGA to make it more functional?

However, RSTC proposed creating thematic areas, each to presumably have its own gap analysis and resulting goals and objectives. The thematic areas and what they would include have not yet been resolved. It is not clear how individual thematic area gap analyses should proceed.

No additional work on the existing draft EPGA has been completed.

A functional higher level EPGA and individual thematic area gap analyses should complement each other. A functional EPGA could potentially better identify policies with multiple environmental benefits (or impacts) and confirm what components of natural environment are not addressed by existing policies. Individual thematic are gap analyses would be suited for a given policy area.

#### How can the existing draft EPGA be improved?

The September 2020 draft EPGA begins to address key questions posed in its introduction but could be more comprehensive, functional, and useful.

Key weaknesses include an incomplete list of natural environment components ("natural assets" in the draft EPGA) and a lack of clarity in how and how well natural environment relates to Saanich policies. The current draft doesn't show how components of Saanich's natural environment are or are not addressed by existing policies, nor does it identify policies with multiple environmental benefits (or impacts).

The staff report to Council (Jan 16 2023) regarding RSTC progress stated "RSTC to define if (EPGA) still desired", suggesting the EPGA wasn't needed; senior staff suggested (in answer to a question from council at that meeting) that the Sept 2020 draft EPGA was adequate in its current form. I disagree.

- RSTC still can and should improve the EPGA.
- Resilient Saanich is a complex process. It is important to periodically re-examine what was once considered adequate. Gaps can become more obvious as other component projects proceed.
- No one else is likely to improve the EPGA at this point.

What can RSTC do at this point? We <u>cannot</u> thoroughly assess how (and how well) current policy tools address and protect Saanich's natural environment. We <u>can</u> make improvements and suggest needed next steps as part of our EPF report.

#### Issues with the existing draft EPGA:

- Table 1 presents an odd breakdown of natural environment or "natural assets". For example, habitat is separate from ecosystems; soil is separate from terrestrial ecosystems, but water isn't separate from freshwater ecosystems and watersheds. Urban forests are specified but not agroecosystems. (Note: the State of Biodiversity report refers to area of agricultural land)
- 2. Table 1 What constitutes "Natural environment" seems incomplete. For example:

(a) The draft EPGA doesn't include or obscures some abiotic components (light, sound, air quality, temperature, water quality) of the natural environment. Human activity, especially with urbanization, affects abiotic components. They should be explicitly included in Table 1: human activity affects those components; resulting changes may directly affect biodiversity and human health; the components are or can be monitored and mapped; and human impacts on abiotic components to RSTC 2022).

(b) The draft EPGA doesn't explicitly acknowledge that ecosystems in the urban landscape are fragmented, disturbed, and novel to varying degrees – for example, "backyard biodiversity"

- 3. Table 1- "Human benefits" is an odd category and inconsistently treated. It might suggest to some that <u>our</u> well-being is the primary reason that the well- being of the natural environment is important. That seems inconsistent with our principles, especially principle #1..
- 4. Table 1- "Threats" (= stressors) are a mixture that range from very proximate to the local environment (and controllable at the municipal level) to things that the municipality can't control but could (and should) adapt to. Distinguishing between proximate threats and those which are more global may be appropriate local policy development
- 5. Table 2- several policies are currently undergoing updating
- 6. Table 3 It is unclear what the assessments of bylaws in Table 3 mean and how they were arrived at.

For example, what does it mean in terms of natural environment to "be complete and up-todate" or "could be reviewed"? Table 3 refers to 43 "enabling legislation tools" and associated bylaws – of those 6 were "complete and up-to-date" 21 "could be reviewed" 8- "absent or missing" and remainder no assessment. The different bylaws are not connected to the different components of natural environment.

- 7. Table 4- there is some consistency with what we've been saying in our ongoing stewardship report- but also conflict
- 8. Table 5- Attempts to integrate 7 natural asset classes from Table 1 with the "assessed" policy approaches- but:
  - (a) the natural asset classes may be inadequate as components of natural environment;
  - (b) the information underlying the color-coded assessments is unclear; and
  - (c) it's not clear what is included in each of the 28 (7 x 4) colored squares. Of those 28, 3 are said to be "complete and up-to-date" 9 are "significantly out-of-date" or "missing key elements" 13 have "room for improvement or need review" (+3 vacant entries under community stewardship). The comments are based on what is <u>not</u> shown in the colored squares so the conclusions are questionable.

#### **General thoughts:**

- 1. The draft EPGA is a good start it includes the main pieces necessary for a functional EPGA. It is also a good resource for other RSTC projects like the Stewardship report
- 2. To make the EPGA more functional, consider reassessing whether the existing "natural assets" category adequately covers "natural environment"; better identify what threats/stressors are potentially controllable locally or can be largely only adapted to; show clearer linkages between environment or stressors and policy and indicate what the policies actually are intended to do.
- 3. RSTC can do some, but not all needed revisions. We can make significant improvements and recommend others in the hopes that someone will complete the task of making the EPGA useful.

#### Possible improvements:

- Table 1 Delete "human benefits" column; recognize in EPGA introduction interrelationships among human impacts on (a) abiotic environment (b) biodiversity/natural ecosystems and (c) human health and wellness
- 9. Table 1- Revise "natural assets" classes to better reflect item #1, be more hierarchical, better align with the SOB report, and link via stressors to policies/regulations/etc. Add farmland and "backyard biodiversity" (SOB) to acknowledge that biodiversity and ecosystems occur and differ across a disturbance/urbanization gradient.
- 10. Table 1- Update the list of stressors potentially associated with different components of environment. Distinguish between those potentially controllable by the municipality versus not directly controllable. The latter require municipal policies that mitigate or adapt to stressors but can't prevent them. Similarly, Natureserve (2) distinguishes between "direct" and "indirect" threats, although the classes of stressors used by Natureserve and the IUCN (3) may not be ideal for linking environment, stressors and local policy in a Saanich-specific context.
- 11. Assign numeric codes to either classes of environment or to associated stressors and assign the same codes to policy tools.

- This could facilitate sorting and identifying (a) gaps in what aspects of environment or stressors are addressed (b) policy tools with multiple environmental benefits.
- An advantage of coding environment components is that they are understandable and key words may be easier to find in policies. An advantage of coding stressors is that stressors are what policy tools typically directly address. In other words, policy tools often address the action (causing the stress) not the environment (the outcome).
- Base the coding on 10 or so components of environment (or on the stressors) rather than on the ca. 200-300 policy tools that Saanich currently have (ca. 211 on the Saanich web page, 13 planning (OCP, LAP) documents, ca. 50 other strategic documents).
- 12. Table 3- Note the limitations inherent in the "assessments" of existing policies. Point out the uncertainty in knowing the intent (especially for regulations) and what "adequate" or "room for improvement" means with respect to protecting the specific aspect of environment.
- 13. Table 4. Align with stewardship WG findings.
- 14. Table 5. Amend to account for changes to Tables 1,3,4,5

#### Footnotes

- Natural environment refers to (1) abiotic factors necessary for life (2) physiography arising from planetary processes (3) biota and ecosystems that occurred on southern Vancouver Island pre-European settlement and still could occur given adequate habitat. Introduced and naturalized species might be considered as "natural environment" recognizing they may have deleterious effects. Natural environment (1) contrasts with the modern built environment, i.e., infrastructure made from relatively permanent human-manufactured materials<sup>2</sup> and (2) for our purposes, is predominantly outside of human structures.
- 2. Master, L. L., et al. 2012. NatureServe Conservation Status Assessments: Factors for Evaluating Species and Ecosystem Risk. NatureServe, Arlington, VA.
- 3. Salafsky et al. 2008. A Standard Lexicon for Biodiversity Conservation: Unified Classifications of Threats and Actions. Conserv. Biol. 22: 897

# District of Saanich | Biodiversity Conservation Strategy Notes from DHC

## Agenda | RSTC Meeting

DATE: Aug 17, 2023

**TIME:** 6:30 PM – 8:30 PM

#### 1. High level key messages from the collated response from RSTC

- Overall, there must be clear definitions, timelines, funding estimates, and active engagement
- The Strategy must include measurable indicators and targets
- All recommendations must include timelines and a commitment to adequate resources to carry them out.
- Funding estimates and revenue streams must be included (ie taxes, DCC)
- Definitions, indicators, and data for quantifying biodiversity and ecosystem condition are inadequate and must be updated. They must reflect up-to-date scientific knowledge and cultural importance.
- Indicator species should include those important to First Nations.
- The District must make a commitment to assess the impacts of policies and actions on biodiversity and the natural environment. These assessments should be shared with the public.
- The concepts of "protecting" and "enhancing" biodiversity need clearer definitions within the BCS. "Protection" involves more than designating areas, while "enhancement" requires active management.
- Management plans are recommended for priority parks to better understand biodiversity
- There must be greater attention to private land regulation
- The Green Infrastructure Network (GIN) must be supported by scientific evidence supporting corridor networks and focusing on enhancing hub areas.
- The strategy must include the protection of aquatic biodiversity in lakes and wetlands. There is a need for aquatics condition assessments and rehabilitation efforts.
- Pursue the adoption of an EDPA with greater protection for areas outside of the UCB

#### 2. Organization of Strategy Goals and Recommendations

- 1. Improve knowledge and mapping of natural features and functions
- 2. Acquiring and protecting a network of habitat areas
- 3. Enhancing biodiversity during land use planning and development
- 4. Enhancing biodiversity on public lands
- 5. Encouraging biodiversity initiatives on private lands outside of the development process
- 6. Improve public understanding of biodiversity
- 7. Enhancing biodiversity on agricultural lands
- 8. Monitoring the state of biodiversity
- 9. Implementation of this Strategy

An excel spreadsheet of recommendations will be provided in the following format:

High Level Goals (Report Chapters)	Category	Main Recommendation	Sub Recomendation	Comments	Cost	Priority	Timeline	Responsibility
Improve knowledge	and mapping of natur	al features and functions						
				Prioritise more detailed mapping within the UCB where development pressure is greatest.	\$\$	High	1-5 years	

#### 3. Categories for costing, priority and timelines

#### Costs ranges

- \$ <\$25,000
- \$\$ \$25,000-\$100,000
- \$\$\$ >\$100,000
- Ongoing cost

#### Priority ratings

- Low an improvement that, while beneficial, is not immediately critical to the overall health of
  natural ecosystems in the District. It could be implemented over a longer timeframe without
  significant negative consequences. These enhancements can be pursued when resources and
  capacity permit.
- Med an improvement that holds a significant level of importance for the natural ecosystems in the District. Implementing medium-priority enhancements would lead to noticeable positive changes in the near to mid-term. These actions require a moderate allocation of resources and their timely execution is valuable.
- High A critical improvement that demands immediate attention and action. These
  enhancements are paramount for the well-being of the natural ecosystems in the District.
  Implementing these recommendations will result in substantial positive transformations.
  Delaying high-priority enhancements could lead to significant and potentially irreversible
  consequences.

#### **Timelines**

- <1 year</li>
- 1-5 years
- 5-10 years
- Ongoing