



# District of Saanich Park Natural Areas Action Plan 2012-2017

June 2011



# District of Saanich

## Park Natural Areas Action Plan 2012-2017

### 1.0 Purpose

A significant portion of Saanich's park lands contain natural areas. These vary in ecological integrity: some contain intact rare ecosystems while others are dominated by invasive plants. In all cases, our park natural areas contribute to the environmental, social and economic well-being of the community. Active management is needed to protect, enhance and restore our park natural areas and the benefits and services they provide.

This Action Plan describes the major management initiatives to be undertaken in our park natural areas over the next five years. The initiatives are:

- Invasive Species Management Strategy
- Mapping, inventory & monitoring
- Community collaboration & outreach
- Park Management Plans
- Best Management Practices

This Action Plan is guided by the Park Natural Areas Management Guidelines. It addresses the "Sustainable Saanich Official Community Plan" (OCP 2008) community themes of environmental integrity, social well-being, and economic vibrancy. The Action Plan also reflects the Parks and Recreation department's vision and mission statement that we "...create opportunities that enrich the community, sustain quality environments and support healthy lifestyles."

## 2.0 What is a Park Natural Area?

There are as many ways to define natural areas as there are natural areas. For the purpose of these guidelines, the definition acknowledges the three OCP community themes while focusing specifically on parks.

Park natural areas are defined as park spaces that are relatively undisturbed and contain a high percentage of native species, providing habitats for a diversity of native wildlife. They are natural or near natural in character, or are in the process of recovery from human disturbance. These natural areas may represent or contain fragments of regionally typical ecosystems; they may contain habitat for endangered plant and animal species. They help maintain a diversity of living organisms through the conservation of wild genetic resources (after Dunster & Dunster 1996).

Compared with cultured or manicured areas, park natural areas generally require less routine and intensive management to ensure their sustainability; however, because they are situated within urban areas and are usually degraded, they require active management.

Zoning alone does not necessarily identify park natural areas, which can occur within parks zoned other than P4N. Likewise, Saanich has many small land parcels that are zoned P4N but are often infested with invasive plants and may be too small or isolated to warrant restoration effort. Although these spaces can offer some wildlife values and may contain some native plants, they are not managed as park natural areas.

Similarly, although spaces such as rain gardens, oldfields, seasonally flooded farm fields and un-mowed road rights-of-way do offer valuable ecological services, they are not park natural areas under these guidelines. There are as many ways to define natural areas as there are natural areas. The definition Parks uses acknowledges the three OCP community themes while focusing specifically on park lands.

## 3.0 Background

### 3.1 Looking back

In the past, Saanich managed park natural areas through a hands-off approach, following the common thinking of the day that nature will take care of itself. In more recent years we have become aware that development, climate change, human-caused disturbance and the spread of invasive plant species have disrupted natural ecological processes and that natural areas cannot maintain themselves in a healthy ecological state—ecosystem based management is required.

In 2003, a strategy for invasive plant species was collaboratively developed between Environmental Services and Parks. In 2005 the Parks Department began

to shift towards active management of park natural areas. One result was a departmental restructuring in 2005 and the staffing of a new position of Manager of Urban Forestry, Horticulture, and Natural Areas.

A 2006 survey of Saanich citizens showed that the public supports protecting the natural environment, along with recreational opportunities, park development and trails. This has been echoed through rising community interest in volunteer stewardship, and expectations for more ecosystem-based decision making in park operations. To meet the growing demands of community-based stewardship, Parks secured a half-time Environmental Education Officer.

In 2008, a workshop and survey was held for volunteers with a goal of building capacity and public engagement in park natural areas stewardship. The survey results were the basis of the “Searle Report” (EKOS Communications 2008), which contained a number of recommendations that have been incorporated into this Action Plan.

In 2009, the Natural Areas Working Group (NAWG) was established to forge collaboration between Environmental Services and Parks particularly on invasive species management. In mid-2009, a funding reallocation allowed staffing of a full-time Natural Areas Technician as a technical resource to the parks division.

Throughout this period, in addition to supporting volunteer activities, Saanich staff have undertaken a number of restoration initiatives, such as various native plantings in Mount Douglas, Camas, Bow/Brodick, Browning, Baxter and Cedar Hill parks; and education initiatives such as new web pages, brochures, invasive species information sheets, and early detection rapid response to new invasive species that threaten park natural areas—garlic mustard in particular.

In March 2011 Saanich Parks developed the Saanich Park Natural Areas Management Guidelines document that defines the framework within which park natural areas are managed to provide the best possible benefit to residents living within Saanich and the Capital Regional District. These guidelines have been developed to help us make appropriate decisions as we undertake new development in park natural areas or to guide the Parks Divisions operations, and maintenance activities within park natural areas. Active management is needed to protect and enhance our park natural areas and the benefits and services they provide.

Saanich is an active member of the Capital Region Invasive Species Partnership and Coastal Invasive Plant Committee. These groups collaborate on invasive species management and ecological restoration within the region to ensure information is exchanged and communicated throughout the region.

### **3.2 Current status**

At present, Saanich contains 82 natural area parks (P4N and P5) comprising about 485 ha of land. However, these numbers do not accurately reflect the total area of park natural areas. A complete ecological assessment and inventory of park natural areas has not yet been undertaken but is recommended as one of the actions within this plan.

Our park natural areas represent several ecosystems, including wetland, riparian, coastal bluff, Coastal Douglas-fir, and Garry Oak ecosystems. Each of these has unique features and challenges, and many contain rare and at-risk ecological communities. Nineteen federally listed species-at-risk (SAR) are known to occur in Saanich park natural areas, which contain 31 occurrences of these species (i.e., some SAR occur in more than one park natural area). Rare species surveys have been completed in the majority of park natural areas. Nonetheless, we take several progressive steps to protect our SAR by:

- working with federal Recovery Strategy team representatives to inventory selected SAR populations;
- undertaking protection and restoration for four SAR species at five locations;
- implementing habitat conservation and supporting population enhancement if called for through a Federal Recovery Strategy.

In addition, Saanich supports or undertakes many restoration-focused projects aimed at habitat enhancement and protection. For example, more than 1000 native trees and shrubs were planted in park natural areas in 2009 and over 3000 in 2010.

The Urban Forest Strategy (UFS), launched in 2010, provides a long-term plan for achieving a sustainable urban forest, much of which occurs in park natural areas. Implementing the UFS has synergy with the Natural Areas Action Plan.

### **3.3 Community stewardship**

Volunteers play a major role in natural areas stewardship. To help guide and support their work, Saanich developed the Pulling Together Volunteer Program. This program, which includes the Garry Oak Ecosystem Restoration Project (GORP), provides start-up training, ecological restoration guidance, staff and equipment, invasive species debris removal, signs, safety vests, funding information, and annual training and recognition events. A part-time Coordinator of Volunteers assists with program delivery.

Volunteer activity highlights:

- over 80 registered volunteers;
- stewardship activities occur at 34 sites;
- 15 established groups, of which 12 hold one or more work parties per

month, the remainder at least twice per year;

- several informal groups or individuals work at sites once or more per year;
- more than 4800 volunteer-hours were recorded in 2010;
- more than 40 dump-truck loads or about 38 tonnes of invasive plant material were removed in 2010;
- more than 300 people volunteer each year at single events such as Tree Appreciation Day and the Gorge Park clean-up.

Through the Pulling Together Volunteer Program, members of the community are playing an important role in helping us manage our park natural areas.

## 4.0 Initiatives

Through the development of the Park Natural Areas Management Guidelines and the review of the Sustainable Saanich OCP (2008) and the Saanich Strategic Plan 2011-2015 the following five initiatives were identified for priority implementation.

### 4.1 Invasive Species Management Strategy

The spread of invasive species has become a major concern for ecologists, naturalists and land and water managers across the province of British Columbia. Awareness about the ecological and economic impacts caused by invasive species has grown over the past decade. It is now estimated that the spread of invasive species is second only to habitat loss, as the major cause of declining biodiversity.

Saanich has committed increasing resources to controlling invasive species, particularly those that pose high ecological or human health risks. Some of these invasive species have been included in our noxious weed list, but several new invasive species that may warrant rapid response to contain their spread come to our attention each year. In addition to invasive plant species, there is increasing concerns about the effects of nuisance animals both native and introduced.

Saanich's Strategic Plan (2011 – 2015) Initiative C4a identified the need for Saanich to develop an Invasive Species Management Strategy (ISMS). The purpose of the ISMS is to optimize municipal resources by setting priorities and establishing a program to minimize the impacts of invasive plant species in Saanich. The ISMS will address invasive species management on public and private land, staff roles and responsibilities, priorities, actions, community stewardship, partnerships, and resources.

The ISMS will be developed by consultants and will include meetings with internal staff and a staff working group, Environmental Advisory Committee and Parks, Trails and Recreation Advisory Committees, Saanich Community Association Network (SCAN), community and other stakeholders (community associations, special interest, stewardship, regional partners etc.).

The Restoration of Natural System Program at UVIC, led by Val Schaefer have received the contract to develop the Invasive Species Management Strategy for Saanich. Stakeholder consultation is currently under way and completion of the ISMS is scheduled for November 2011.

### **Strategy objectives:**

- Create a vision for managing Invasive Species for a period up to and including 2025
- Develop methods and criteria for prioritizing resource allocation for the management of individual invasive species or sites;
- Determine resources required, including external funding sources;
- Develop an early detection/rapid response program;
- Make recommendations for mapping, inventory and monitoring of invasive species
- Develop integrated approach for public and private lands;
- Develop guidelines to use to determine when ecological restoration is warranted;
- Review and make recommendations for invasive species biomass disposal;
- Review current status of invasive animals and make recommendations on options for the municipality to consider;
- Review existing invasive species management program and make recommendations on how to better coordinate existing District resources;
- Make recommendation on coordination with federal, provincial, regional and other stakeholders;
- Review of current legislation and make any recommendation required (federal, provincial, municipal bylaws, regulations, etc.);
- Review the existing Saanich Pulling Together Volunteer Program;
- Identify an action plan of the Invasive Species Management Strategy priorities for 2012 – 2017
- Make recommendations on outreach and awareness initiatives required to compliment the action plan.

## **4.2 Mapping, inventory & monitoring**

Most Saanich lands have been mapped using the Sensitive Ecosystems Inventory (SEI). This system is broad in scale and is useful for guiding development planning. The SEI is not intended to provide detailed information specific to park natural areas and does not capture fragments or sensitive ecosystems that are small by their nature, such as vernal pools. To date, we have not completed ecological assessments and inventories of all our park natural areas.

To aid in park planning, management, and delivery of the Invasive Species Management Strategy, data needs to be collected on location, size, shape, general vegetation cover including ecological assessments, invasive species, drainage



patterns, presence of species and/or ecosystems at risk, and general ecological integrity. This data should be collected with a GPS, recorded in table format, and incorporated into the Saanich GIS. The database should be updated every five years to ensure accuracy as conditions change.

Monitoring should be carried out on a five-year rotation to assess site conditions and record changes. Management plans and practices should be adapted to changes if needed. This work and data should be compatible with and could be undertaken as part of the urban forest inventory project. Graduate students could also be engaged to carry out inventory work.

**Target completion:** 2015 (inventory & mapping); monitoring annually on a 5-yr rotation or more frequent at sites that are identified with higher priority.

**Budget:** Under current staffing levels, external resources (e.g., consultants, grad students) will be required.

### 4.3 Community Partnerships & Outreach

Our goal in managing park natural areas is to preserve, enhance and restore native ecosystems while providing for appropriate recreational opportunities. Community involvement is essential to our ability to achieve this goal. This involvement includes volunteer stewardship, research collaboration, and outreach aimed at educating and engaging the public about the value of healthy park natural areas.

#### **Volunteer stewardship**

Typically, members of the community contact Parks to do volunteer invasive plant removal at a specific park. The Saanich Pulling Together Volunteer Program works with these volunteers to form a registered group. The demand from the community for environmental volunteer opportunities is growing, yet the amount of volunteer activity relative to the comparatively large park natural area is small. Many park natural area sites need stewardship and, in the absence of more staff resources, more volunteers are needed. Also, the existing volunteer base is aging, as such, educating and increasing the volunteer base with a younger demographic will ensure support will be on-going.

The Pulling Together Volunteer Program will be used to grow the volunteer base and meet increasing community demand for park natural area stewardship. Our goal is to establish three new stewardship groups per year. The goal is an efficient program and a well-trained volunteer pool that can be utilized at any of Saanich's park natural area sites.

As we grow the stewardship base beyond current levels, administrative workload will increase and additional resources beyond the current capacity of a part-time contract Coordinator of Volunteers (COV) may be required. If we maintain the current level of support without additional resources, we can expect a loss of

oversight and ecological damage may result as groups decide to take action without our guidance. Additionally, new sites may receive no attention at all.

**Target completion:** December 2011. The Pulling Together Volunteer Program is currently in draft form. In 2011, new stewardship groups are being planned for Peacock Hill, Layritz Park, Falaise Park, and Camrose Park.

**Budget:** TBD; COV

### **Research collaboration**

There is mutual benefit to forging stronger relationships with specialists who are interested in doing research in our parks. This includes groups such as Habitat Acquisition Trust (HAT), Ducks Unlimited Canada, Garry Oak Ecosystems Recovery Team, and the academic community. Collaboration would provide us with direct links to science-based aspects of natural areas management and opportunities for the community to observe and perhaps participate in research. These partnerships also increase the probability of winning external funding.

This initiative will seek to formalize agreements with local Environmental Non-Governmental Organization (ENGOS) and on-going research relationships through UVic, Camosun College, Royal Roads and other institutions in the region.

**Target completion:** Meet with UVic program directors, Camosun College program directors and HAT in 2011; others in 2012-2015.

### **Outreach**

To help engage the public and forge a stronger relationship between the community and park natural areas, outreach will be undertaken that includes interpretive signs, webpage updates, revised brochures, local newspaper and newsletter submissions, and more connections with various social networks such as Conservation Connection and UVIC's Restoration Network.

Interpretive signage is in the Parks Planning and Design section work plan for 2011. For signs have recently been installed in Baxter Park the site of Trees For Tomorrow planting of 150 trees and over 2000 native under story shrubs in 2009. Natural areas resources will be used to support that work to increase awareness of active restoration, rare ecosystems, and volunteer opportunities.

**Target completion:** 2011 – 2015 - ongoing.

## **4.4 Best Management Practices**

Best management practices (BMPs) are work procedures that are based on current research and experience so that they are both operationally practical and ecologically appropriate.

Parks will develop BMPs for operations activities within park natural areas so that

damage or undesirable alteration to habitat, rare species, and other valued park elements are avoided. BMPs will be prepared through consultation with staff, including Natural Areas, and expert external resources if needed. BMPs that should be completed in 2011 are:

- mowing & trimming
- equipment sanitation
- trail construction & maintenance

**Target completion:** on-going.

## 4.5 Park Management Plans

Our many parks are complex, encompassing a mix of built amenities, ecosystems, habitats, and conflicting visitor uses. The Park Natural Area Management Guidelines have been developed to help us make appropriate decisions as we undertake planning, development and management of our park natural areas. However, park-specific management plans are needed that comprehensively address all issues and allow work to be incorporated into capital and operations program cycles.

Park Management Plans will be developed in accordance with the Park Natural Area Management Guidelines. This process will be coordinated mainly through park planning and design phases with input from all Parks sections, Environmental Services, and external resources including community associations and, if needed, consultants. Natural areas components of the Park Management Plans will include ecological assessments, inventory and mapping, and ecological restoration plans.

The following parks are proposed as priorities:

- Mount Douglas
- Bow/Brodick/Feltham
- Rithet's Bog
- Mount Tolmie
- Quick's Bottom (including Markham Rd facility)

In the longer term, parks that warrant management plans due to their mixed use, ecological elements, or other unique features are:

- Beckwith
- Colquitz River complex
- Glencoe Cove – Kwatsech
- Gorge Park
- Peacock Hill
- Konukson
- Knockan Hill

- Layritz
- Panama Flats

**Target completion:** 1-2 priority parks undertaken per year;

**Budget:** External resources (e.g., consultants) may be required.

## 5.0 Summary

Along with the development of the Park Natural Area Management Guidelines, the Park Natural Areas Action Plan describes the framework within which park natural areas will be managed to provide the best possible benefit to residents living within Saanich and the Capital Regional District. The major management initiatives to be undertaken in our park natural areas over the next five years are:

- Invasive Species Management Strategy
- Mapping, inventory & monitoring
- Community collaboration & outreach
- Park Management Plans
- Best Management Practices

The implementation of the Park Natural Areas Action Plan will be referred to in Strategic and Departmental Plans as well as the budget review process over the next five years.

## 6.0 References & resources

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