Uplands Park & Cattle Point

Management Plan

submitted to:

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1 Introduction

Uplands Park, a municipal park located in the District of Oak Bay, is a place of exceptional beauty, home to a rich variety of flora and fauna and offering superb vistas of the sea, magnificent and varied landscapes, and spectacular displays of flowering meadows. Its rare ecosystems and unusually large number of endangered plant species make it a place of national conservation significance. It is rightfully a source of pride for Oak Bay residents who consider the natural environment to be at the core of Oak Bay's identity and an important part of what makes it such a desirable place to live (Oak Bay Official Community Plan, 2014).

Uplands Park is bordered on three sides by an urban residential neighbourhood and on its southeastern end by Haro Strait. With an area of 31 hectares, it is the largest in Oak Bay's park system and accounts for more than 75% of the municipality's undeveloped natural parkland.

Figure 1—View of Mount Baker from Cattle Point

The administrative entity of Uplands Park consists of two distinct parts: Cattle Point and Uplands Park (sometimes referred to as Uplands Park "proper"). These sections are separated from each other by Beach Drive.

Cattle Point, situated on the ocean side of Beach Drive, is a 5.5-hectare piece of land consisting of a rocky coastline aside the Victoria Harbour Migratory Bird Sanctuary, the oldest such sanctuary in Pacific Canada (established 1923). Cattle Point offers magnificent views of the water, islands and mountains, abundant birdlife and marine life, maritime meadows, and an impressive diversity of plants, some of them extremely rare and of national significance. With the exception of the many informal trails that crisscross its meadows, Cattle Point is fairly well developed and the most heavily used section of the park. It contains well-used boat launch ramps, a scenic waterfront drive, parking facilities, information kiosks, benches and picnic tables, and a single portable toilet (port-a-potty).

Figure 2—Map of Uplands Park and Cattle Point

Administratively, Uplands Park and Cattle Point are treated as a single park: Uplands Park. However, most people, including park managers and the public, distinguish between Cattle Point on the southeast of Beach Drive and the larger section of the park to the northwest, which they call Uplands Park. This map shows the main fire routes into the park (red), and the 100 treatment units ("TU"s) that were developed to help organize work related to the park's *2018 – 2025 Invasive Plant Management Plan*, and are referred to in this management plan for identifying areas for activities.

On the north and northwest side of Beach Drive is the remaining, and much larger, 26-hectare section of the park commonly referred to as "Uplands Park" to distinguish it from Cattle Point. It contains at least 16 distinct plant communities ranging from Garry Oak woodlands to meadows and vernal pools, providing habitat for 22 rare and endangered plant species. With the exception of annual mowing and brush cutting by the municipal parks department to reduce the risk of fire, this section of the park has been kept in a

largely natural state with no built infrastructure except a sign and kiosk at its entrance, gravel fire access road and three fire hydrants. Its many informal and untended trails offer visitors opportunities for outdoor enjoyment in one of Canada's rarest and most endangered ecosystems. This section of the park is also of considerable archaeological interest as it was once part of a large pre-contact Coast Salish cemetery, and contains many burial cairns and other cultural features, some dating back more than 1500 years (Mathews and Kilburn, 2013).

A small, half-hectare manicured section on Beach Drive between Cattle Point and Uplands Park is devoted to a war memorial, and is not considered part of this management plan.

Although Cattle Point is technically part of Uplands Park, where this document refers to Uplands Park it only refers to those portions of the park west and north of Beach Drive. Where it refers to Cattle Point, it only refers to the area east and south of Beach Drive. When addressing issues common to both units, it refers to them as 'Uplands Park and Cattle Point'.

Figure 3—Central Meadow (TU62) in full camas bloom

2 Park Values

2.1 Recreation

Uplands Park and Cattle Point offer one of the best places in the Greater Victoria Area to enjoy the outdoors. Many hundreds of people visit the park each day to take in fresh air, stretch their legs, walk their dogs and connect with nature in what is arguably one of the city's most beautiful settings and one of the best places to view the islands, volcanoes and mountains that frame the seascape off its shores. During the spring and summer months, the number of visitors increases as Cattle Point becomes a popular stop for tourists and guided tours of the city.

Uplands Park and Cattle Point are also widely considered to be one of the most outstanding pieces of natural heritage in our region. They contain, within a relatively small area, a remarkable diversity of flora and fauna, and a varied landscape that includes rocky seascapes, woodlands of majestic oaks, wet prairies and meadows of camas and wildflowers, which in Canada are unique to southeastern Vancouver Island, the nearby Gulf Islands and two areas in the Fraser Valley. Ranked as one of the top five birding sites in the Capital Regional District, Cattle Point and Uplands Park are important destinations for birders from all over the region, and its Garry Oak ecosystems and rare flora are famous among naturalists and researchers who flock to the park in the spring to view its meadows in bloom. Local schools use the park extensively for outdoor classes to educate students about the natural and cultural history of the region, and colleges and universities regularly hold field study courses in the park. Interesting bedrock features and the traces of two different processes of glacial erosion at Cattle Point make it one of Victoria's premier geological sites and a destination for university geology classes.

The park is unusual for a city park in that large parts have been left in an undeveloped, semi-natural state without formally defined walking trails. The exception is Cattle Point which offers a number of amenities including a paved scenic drive, parking spaces for cars and boat trailers, a port-a-potty and two boat launches that are well used by recreational boaters. Of the two sections of the park, Cattle Point is the more heavily used. Interpretive kiosks explaining the natural and pre-contact history have been installed in both Cattle Point and Uplands Park.

In addition to the uses cited above, the park is enjoyed for many other purposes, a few of which will be referenced here. For local residents, the large blackberry patches at the park's boundaries are popular for berry picking in the late summer. And, Cattle Point, one of only 14 designated dark sky reserves across the country, is an important destination for amateur astronomers (cattlepointstarpark.org).

The park is used as well for commercial purposes. It is a popular location for film crews who have shot a number of TV series in the park including an episode of CBC's Murdoch Mysteries series. It is often used by small businesses for professional dog walking and dog obedience classes, and occasionally for wedding party photos and recreational activities such as orienteering club races.

2.2 Natural Environment

2.2.1 *Flora and Plant Communities*

Uplands Park and Cattle Point are of national conservation significance. They contain one of the largest and most intact fragments of endangered Garry Oak and associated ecosystems remaining in Canada. These ecosystems, which include Garry Oak woodlands and flowering meadows, vernal pools and seeps[1], rocky outcrops, maritime meadows and coastal bluffs, are home to more plant species than any other terrestrial ecosystem in coastal British Columbia (Garry Oak Ecosystem Recovery Team, 2018). Less than 5% of their original extent remains (Garry Oak Ecosystem Recovery Team, 2011). In addition to their unusual beauty, the park's Garry Oaks, meadows, vernal pools and vernal seeps are home to 24 rare and endangered plant species, one of the highest concentrations in Canada. Some of these plants are found in few other places in the country[2]. A complete list of the rare plants found in the park is provided in Appendix, below. The park is also notable for its deep-soiled Garry Oak woodlands which, because of their rich soils and flat topography have been largely converted to housing and agriculture elsewhere, are now considered very rare. It is one of the reasons one finds in the park some of the region's largest specimen oaks.

While the park's many ecosystems add to its natural interest, it is its open areas with their meadows and vernal seeps and pools that harbour the park's greatest biodiversity. Together, Cattle Point and Uplands Park count 33 such areas totalling 8.6 hectares or 27% of the park's 32 hectares. Of these, only 1.6 hectares are considered maritime meadows, an extremely rare plant community of which only 200 hectares remain in Canada (Garry Oak Ecosystem Recovery Team, 2011). Figure 4 below shows the number of rare plant species by meadow/open area. Four areas stand out for having the highest number of endangered species: Central Meadow (17 species); Eastern Meadow (5 species); Memorial Meadow (5 species) and four of the maritime meadows at Cattle Point which, between them, count 10 species at risk.

[1] *Vernal pools* are a unique type of wetland ecosystem. Central to their distinctive ecology is that they are ephemeral, occurring temporarily and then disappearing until the next year. They are wet long enough to differ in character and species composition from the surrounding habitat, while their prolonged annual dry phase prevents the establishment of species typical of more permanent wetlands. *Vernal seeps* are shallow flows that occur where groundwater emerges on sloping terrain, usually at the lower slopes of hillsides. (Parks Canada Agency, 2006)

[2] Uplands Park contains a significant proportion of the Canadian populations for many of its rare species. For example, 98% of the Canadian population of Mühlenberg's Centaury, 60% of Water-plantain Buttercup and 100% of Kellogg's Rush are found in the park. (Parks Canada, 2006 & 2013).

Figure 4—Number of rare plant species per meadow in Uplands Park and Cattle Point

Cattle Point and Uplands Park are home to a total of 24 rare and endangered plant species; with 22 in Uplands Park and 11 in Cattle Point. Numbers shown are for rare plant species currently known to occur in different areas of the park.

2.2.2 *Fauna*

The fauna of Uplands Park and Cattle Point has not been as intensively studied as its flora, and consequently is less well known. We do know however that it is rich in bird life, both resident and migratory. eBird (ebird.org), a website managed by the Cornell Lab of Ornithology for reporting bird sightings around the world, places Cattle Point in the top 5 birding sites in the Capital Region District based on reported sightings of 218 species. Local birding expert Geoffrey Newell (pers. comm.) has recorded a total of 240 species in both sections of the park, which would make it the top spot in the entire region.

Little is known about most insect groups in the park, although it is reported to support about half the native species of grasshoppers and crickets native to Vancouver Island, an impressive diversity for such a small area (James Miskelly, pers. comm). Western Black Widow Spiders have also been observed in the dryer, rocky meadows of the park (Marian McCoy pers. comm).

Historical accounts make note of an abundance and diversity of butterflies, although today only 7 species are regularly observed (Elizabeth Garrett, pers. comm). Four rare

butterflies are reported to have disappeared from the park over the last 50 years. Taylor's Checkerspot (*Euphydryas editha taylori*) and the Western Branded Skipper, *oregonia* subspecies (*Hesperia colorado oregonia*) were both collected from the park in the 1950s but have not been reported since (Collier *et al*., 2004). The Common Ringlet (*Coenonympha californica insulana*), once the most common butterfly in Victoria, but endangered today, and Propertius Duskywing (*Erynnis propertius*) were last reported from the area in 1995 (BC Ministry of the Environment 2014)[3].

2.3 Archaeological and Cultural Heritage

Uplands Park contains an archaeological treasure of pre-contact burial cairns and mounds. The park lies within what was once an extensive human-modified landscape tended by Coast Salish peoples for centuries prior to the arrival of the first European settlers. First Nations peoples managed the land here intensively for a range of foods, including camas and other staples, medicinal plants and other resources by regular

[3] James Miskelly, a local rare plant botanist and butterfly expert, reports that he saw Common Ringlets in Uplands Park in the early '00s, and was shown a photo of a Propertius Duskywing taken by someone in the park in 2007. It may therefore be premature to declare these two species extirpated from the park.

burning and cultivation. The landscape included sites of spiritual importance and the largest pre-contact Coast Salish burial mound and cairn cemeteries in the Salish Sea, one that extended from a former village located at Willows Beach to a large settlement at Cadboro Bay, encompassing what is today Uplands Park. While much of the original funerary landscape has been altered by historic development, the portions within the park have remained largely protected.

Researchers from Camosun College have studied a section of Uplands Park where they found 90 funerary petroforms and another 17 cultural features, some dating from more than 1500 years ago (Mathews and Kilburn, 2013). Although few people are aware of these archaeological artifacts, they are nevertheless an important part of what makes Uplands Park exceptional and in need of protection.

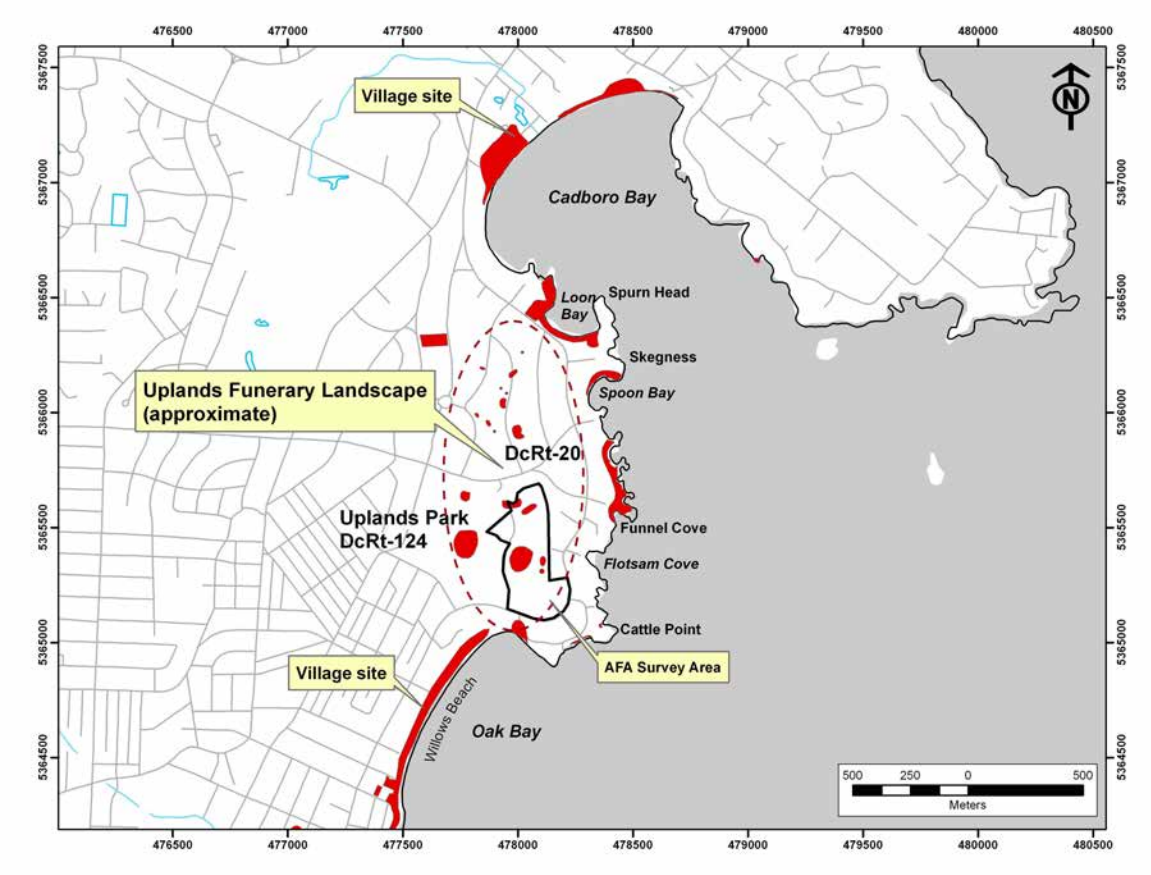

Figure 5—The Uplands funerary landscape showing the Uplands Park study area (Mathews and Kilburn, 2013)

3 Relevant Documents

The following plans, bylaws and background reports were consulted during the preparation of this management plan. The goals and actions identified in this park management plan are consistent with these reports.

- Oak Bay Official Community Plan, 2014, Schedule A to Bylaw No. 4620
- Recreational Use of Oak Bay Parks & Open Spaces: Report of the Parks Vision Committee, March 2005, updated July 2011
- District of Oak Bay Urban Forest Management Strategy, March 2017
- Oak Bay Public Parks and Beaches Bylaw No. 4672
- Oak Bay Animal Control Bylaw No. 4013
- Uplands Park: A Stewardship Plan. (Collier, Spencer and Miskelly, 2004)

Figure 6—Fauna at Uplands Park and Cattle Point

Clockwise from bottom left: The cicada *Okanagana occidentalis*, one of only two local species found in Northeastern Meadow (TU68); Western Black Widow Spider (*Latrodectus hesperus*) making a meal of a grasshopper in TU63; and Killdeer (*Charadrius vociferus*) at Cattle Point (TU92) protecting its ground nest of four eggs which can be seen at the top just off the centreline of the photo.

4 Key Management Issues

4.1 Natural Area Management

The natural environment of Cattle Point and Uplands Park is arguably their most valuable asset and the main draw for visitors, residents and tourists alike. Some of these assets, particularly the Garry Oak meadows and woodlands, and vernal seeps and pools are under severe strain and at risk of being lost forever if not managed carefully. Indeed, information available through the BC Ministry of Environment (http://a100.gov.bc.ca/pub/eswp/), shows that at least three nationally endangered species—Bear's-foot Sanicle, Coastal Scouler's Catchfly and Howell's Triteleia—have disappeared from the park since the 1990s, and one critically imperiled species, Victoria's Owl-clover, has not been seen at Cattle Point since 2004, one of only 4 sites worldwide where this species is known to occur. In addition, as mentioned in Section 2.2.2, four rare butterflies have disappeared from the park.

The Convention on Biological Diversity lists: invasive species; and habitat loss and degradation as two of the top drivers of the worldwide decline in biodiversity (CBD, 2016). Both of these processes are at work in Uplands Park.

4.1.1 *Invasive Plants*

Uplands Park and Cattle Point have an unusually high number of invasive species. More than 80 alien, invasive plants have been observed in the park, where they threaten its rare species and endangered meadow and woodland ecosystems. Many of these invasive species must be controlled if the park's Garry Oak woodlands are to survive and its open meadows, vernal pools and vernal seeps saved from conversion to closed canopy shrubland.

Much progress has been made in the control of invasive species since the early 1990s when volunteers began removing Scotch Broom from a few meadows. This work now encompasses the entire park and targets a larger number of invasive shrubs and trees. By the end of 2018, the park had been kept free of flowering Scotch Broom and Gorse for 5 consecutive years, 14 hectares of Garry Oak woodlands had been cleared of all mature invasive trees, and invasive woody shrubs such as Himalayan Blackberry and English Ivy had been removed from 7.5 hectares of woodlands surrounding the meadows with the highest biodiversity and rarest plants.

The progress seen over the last 10 years is due in part to the astonishing number of volunteer hours organized each year (1600 hours in 2017) by Friends of Uplands Park (Margaret Lidkea) which help the municipality in its successful bids for funding from the federal Habitat Stewardship Program (HSP). These funds allow Oak Bay to hire each year a seasonal crew and project manager to work exclusively on invasives removal from the park. The municipality has also provided arborist time (more than 100 pd since 2014)

and equipment to remove mature invasive trees from the park and many hours of staff time to dispose of the biomass removed by the seasonal crew.

Despite tremendous progress, more years of work lie ahead. Many noxious weeds produce seeds that remain viable for a long time, even decades, meaning that most areas must be retreated for years after initial treatment to control regeneration from the seed bank. As well, large parts of the park have not yet been treated, including the heavily infested woods in the northwestern section of the park. To guide invasives removal in the park, a comprehensive eight-year (2018 – 2025) invasive plant management plan has been developed which includes a series of detailed annual treatment plans with retreating and monitoring schedules and maps identifying locations of activities.

4.1.2 *Habitat Loss and Degradation*

Because of Cattle Point and Uplands Park's status as a municipal park, their ecosystems, flora and fauna are protected from the large-scale loss of habitat that tends to accompany capital projects or other major developments. However, the park's lack of formally demarcated foot paths and signage advising users how they can minimize disturbance has led to a proliferation of informal trails which is leading to a slow but steady decline in meadow habitat. These spring-flowering meadows and open areas are one of the park's key attractions, and where most of its biodiversity and rare plants are found. The situation is particularly dire at Cattle Point where a very large number of visitors hiking in a relatively small area with few obvious trails has led to a severe decline in the health of its maritime meadows, and where camas and other native flora are now generally only found growing in crevices and on the sides of rock outcroppings where people do not tread. The presence of 22 commemorative benches scattered throughout Cattle Point is a likely contributing factor.

Much of Uplands Park floods in winter forcing hikers to alter their route through the park, in the process widening existing paths and creating new ones to avoid flooded areas. This is particularly pronounced in the Central Meadow, which is home to the park's greatest diversity of flowering plants, including 17 endangered species. In the winter, when the meadow is at its wettest, footpaths become flooded and park users are forced to step into growing meadows to avoid getting their feet wet. This has led to a widening of existing trails, trampling of growing native plants at their most vulnerable, and compacting of soils to such a degree that some areas can no longer support native flora. In 2016, a study of the Central Meadow found that more than 2000 m of informal trails had been created over the years, reducing viable meadow habitat by at least 1000 m^2, equivalent to about 10% of the entire meadow area.

A well-designed system of formalized trails and signage—one that fits into the landscape so that it does not detract from its natural beauty—is needed as a matter of priority, starting in Cattle Point where damage may be reaching a point of no return. Wherever possible, wheel chair accessibility should be considered, although not all areas can be made wheelchair accessible.

Dogs can also contribute to habitat loss when they are allowed to dig and run freely over sensitive meadow habitat or when their owners use meadows to play catch. Dog faeces left on site alter the chemical composition of the soil by adding nitrogen, which benefits exotic grasses such as Orchard Grass at the expense of native species, which are adapted to nitrogen-poor conditions (Garry Oak Ecosystem Recovery Team, 2011). A better system is needed for keeping dogs under control and out of the ecologically sensitive parts of the park, one that might include creating a fenced-in section in the park where dogs can run off leash all year long.

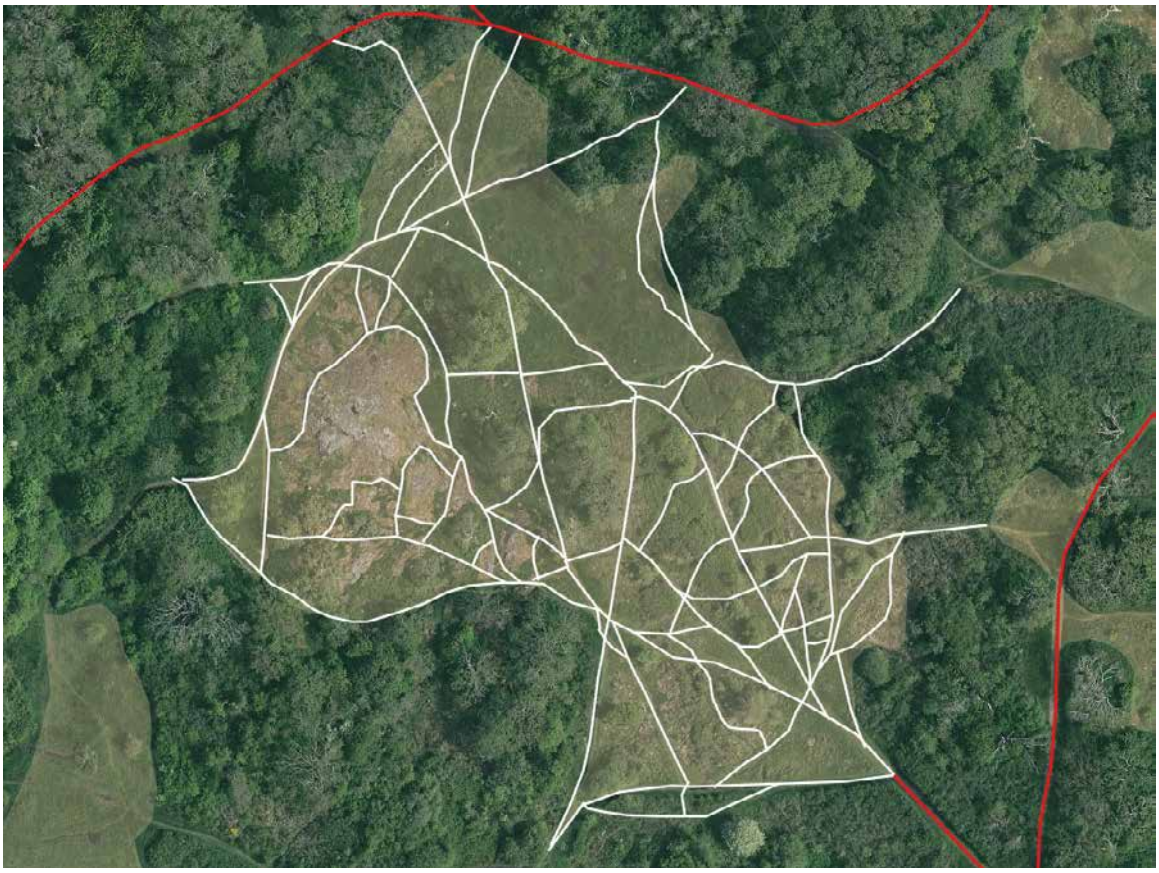

Figure 7—Central Meadow showing the more than 2000 m of informal trails

The white lines represent the many informal trails that weave through Uplands Park's Central Meadow, home to its largest Garry Oak Meadow and 17 rare plant species. The number of these trails is increasing and prime meadow habitat is being lost. It is possible to formalize these trails and reduce their numbers in such a way that park goers can continue to use the neadow with little impact on their ability to enjoy this exceptionally rare and beautiful site.

Uplands Park is blessed with a great diversity of birdlife, including some very rare species that use the park as a rest stop along their migration routes. Others are resident in the park all year round. All add to the rich experience of the park. A big threat to birds comes during the nesting season, when many species build their nests on or near the ground where they can be disturbed by dogs. This is being dealt with effectively by a bylaw requirement for all dogs to be on leash during the nesting season (April – June). This bylaw, however, does not apply to Cattle Point where at least one species (killdeer) nests on the ground and loses its young each year (See Figure 6).

Changing habits and use patterns requires the support of the public. Kiosks with interpretive materials have helped increase public awareness of the park's exceptional natural values, and public outreach programs organized by Friends of Uplands Park and the District of Oak Bay have helped raise awareness among some segments of the population about how they can help protect the park for future generations. However, a more concerted plan is needed to reach other users including the many tourists who descend on Cattle Point from tour buses during the spring and summer months.

Finally, it is worth mentioning the important role hydrology plays in the persistence of some of the park's rarest plants, which depend on vernal pools and seeps for their survival. These ephemerally wet areas remain wet much longer into the spring than the surrounding landscape, although they eventually dry out completely by early summer. The drastic fluctuation in water regime, combined with their rarity, means that vernal pools and seeps are home to many of British Columbia's rarest plants. They can be inadvertently destroyed by slight changes in hydrology such as that which might occur as a result of construction or landscaping on the park's boundary.

4.2 Protection of Archeological Resources

Uplands Park contains within its boundaries some of the region's best-preserved examples of pre-contact ancient burial mounds and cairns, and other cultural features. These funerary petroforms and cultural features are unmarked and often small, and therefore at risk of being inadvertently disturbed by park users and park employees alike. The parks department will need to work with researchers and others to develop a plan for identifying and protecting these sites from disturbance.

4.3 Recreational Management

Most visitors to Uplands Park and Cattle Point are there for the natural beauty and outdoor experiences they provide. The vast majority of park goers believe that recreational activities must not unduly harm the park's natural values, and most try their best to minimize their impacts. However, poor awareness of the locations and sensitivity of endangered ecosystems and plants, combined with a dearth of clearly defined trails and signage, make it difficult for these individuals to know where to step and what activities to avoid. There are opportunities for improving communications, designing walking trails and setting aside sections in the park for certain activities so that park goers can continue to enjoy the park while protecting its natural values.

With the exception of Cattle Point's boat launches, scenic drive and parking sites, most of the park is undeveloped and suitable for passive recreational activities such as hiking, bird watching and dog walking. Generally, the facilities for boaters are adequate and their activities have little impact on the natural values of the park.

Passive recreational use of the park is steady all year long, with a significant increase during the tourist season beginning in the spring and extending into the early fall. This time of year brings with it many tour buses for which Cattle Point is an important stop on

their city tours. Hundreds of tourists at a time are let off their buses and given a few minutes to move quickly around the landscape to explore its many views, take souvenir photos and use the single port-a-potty on site. During the months of March through June this can cause significant damage to the native flora and, in many places, has led to soil compaction that has degraded large parts of the park's maritime meadows. Most people, and especially tourists, are unaware of the rarity and fragility of the park's maritime meadows as this information is not provided as part of their guided tours. There is an opportunity here to develop a comprehensive communications plan that uses different media for relaying key messages to park users, one that includes working with tour bus operators and other tourism-related businesses to provide them with information for tourists that can help them protect the very meadows that make Cattle Point a tourist attraction. There may also be an opportunity for the municipality to create a marked-off vantage point at Cattle Point where tourists can take souvenir photos, without unnecessarily damaging its maritime meadows.

The District of Oak Bay and Friends of Uplands Park hold many public outreach events throughout the year that bring together community members to participate in restoring the park and help raise awareness of its uniqueness. Although no formal study into the impact of these outreach activities has been conducted, anecdotally it can be said that support for preserving and restoring the integrity of the park's natural ecosystems has increased substantially over the last 10 years. There remain however opportunities for reaching out more broadly to other stakeholders through a more comprehensive communications plan.

Certain potentially damaging activities in the park continue despite bylaw prohibitions or a requirement for written consent from the park director. These include biking in the meadows, races, dog-training courses and professional dog walkers. Increasing bylaw enforcement in these areas would offer, among other things, an opportunity to raise awareness about the park's natural values among these users of the park.

Many local residents use the park in the late summer for picking blackberries. Although blackberries are an aggressive invasive species targeted for removal in the *2018 – 2025 Invasive Plant Management Plan*, it is possible to set aside an area in the park where the blackberry won't be removed to ensure a supply of blackberries for local residents.

4.4 Park Fuel Load and Fire Management

Fire exclusion and the invasion of exotic woody species—some of them highly flammable—have led to significant fuel accumulation in Uplands Park, with serious impacts on native biodiversity and increased risk of catastrophic fire. The invasives removal program, started in the early '90s, and accelerated in the mid-'00s with increased funding and volunteer contributions, has helped lower the fuel load in the park by removing flammable shrubs such as broom and gorse from open meadows and the many shrubby invasive trees that fill the understory of the park's woodlands This work will continue as the *2018-2025 Invasive Plant Management Plan* is implemented (See Figure 8). In addition, the municipality takes action each year to reduce the risk of fire spreading

by mowing dry meadows to create firebreaks and brush cutting along the main fire routes into the park to keep them open. These activities usually take place in July when native flora have reached maturity and shed their seeds. Since time to maturity varies from year to year, the Manager of Parks Services always checks with the park naturalist regarding the timing of the mowing and to allow him or her to mark off sensitive habitat to avoid.

While putting out fires in the park must always remain the overriding priority, there are opportunities for minimizing damage to the park's most endangered natural values by providing the fire department with a map of sensitive areas in the park. This has been done in the past, and these maps should be updated periodically, and a short tour through the park with the fire chief organized from time to time.

Figure 8—A week's worth of invasive shrubs removed from the park (2018)

5 Park Management Plan: Vision, Goals and Actions

5.1 Vision Statement

Uplands Park, which includes Cattle Point, is an ecologically intact natural heritage site that is managed in a way that successfully protects its many rare species and ecosystems, along with its archaeological heritage, while encouraging sustainable public enjoyment and appreciation of a unique outdoors setting in ways that do not diminish the site's exceptional natural values.

5.2 Natural Areas Management

The future survival of Uplands Park's sensitive ecosystems, rare species and other natural values are threatened by a combination of invasive plants, a lack of well-defined trails and poor awareness among many users of how certain activities can damage these natural values. Projects to protect and restore these natural values are an essential part of the solution, the long-term success of which depends on ongoing public education and continued support from park visitors, volunteers and the community. Mapping the locations and inventorying the numbers of rare plant species in the park are needed for monitoring and evaluating project effectiveness and for taking corrective action, if needed.

Goal 1—Protect natural areas, starting with those with the highest conservation values.

Actions:

1.1. Formalize footpaths at Cattle Point.

- Design a network of footpaths that provides park visitors with opportunities to enjoy views and appreciate the natural history of Cattle Point while protecting species at risk, endangered maritime meadows and vernal pools where they occur.
- Consider wheelchair accessibility in the design of the footpath network.
- To the extent practicable, employ a footpath design that blends in with the surrounding landscape and does not detract from the natural beauty of the site but that, at the same time, does not alter the soils and water flow on the point, which provide the habitat that sustains the rare plants.

- In some places on the point (e.g., in TU90[4], the maritime meadow north of the second boat ramp), it will be necessary to build short stretches of raised boardwalk over sections of the trail system that are flooded in the winter in order to discourage park users from stepping off trail into sensitive habitat.
- Review placement of existing benches at Cattle Point in light of the newly developed footpath network and consider repositioning those that encourage walking off trail.
- Install educational signage that communicates the ecological significance of Cattle Point with suggestions on how park users can reduce their impacts and help its survival into the future. (Signs have been printed).

1.2. Create a vantage point for tourists / tour bus passengers at Cattle Point.

- Identify a vantage point at Cattle Point that provides tourists, particularly those arriving by tour bus, with a place to enjoy the magnificent ocean views and take souvenir pictures where they won't cause damage to the maritime meadows and rare plants.
- Mark out this area clearly with appropriate signage and advise tour bus operators with information on its existence.

1.3. Close off Uplands Park's Central Meadow (TU62) during the wet season.

- Build a system of sturdy split rail barriers at all major entrances to the Central Meadow that can be easily opened and closed.
- The barriers will be used to exclude foot traffic from the meadow when it is at its wettest—roughly, early November until early spring—when foot traffic can trample growing plants at their most vulnerable, and compact meadow soils to a degree where they can no longer support the native plants that once grew there.
- The idea is that when the meadow is re-opened, flowers will be reaching their peak, foot paths will have started to dry out and park users will no longer need to step into actively growing meadows in order to avoid the flooded trails. This will help reduce the widening of existing trails, as has been happening over the last few decades, and will allow more meadow plants to reach maturity, flower and set seed.
- Allocate staff time to open and close the Central Meadow twice a year (fall and spring).

1.4. Formalize footpaths in the three rare-species-rich meadows of Uplands Park (Central Meadow—TU62; Eastern Meadow—TU67; and Monument Meadow—TU75).

- Design a network of footpaths that provides park visitors with opportunities to appreciate the natural beauty of these areas of the park while protecting

[4] TU standards for "treatment unit" which were developed for the invasive plant management plan and of which there are 100 in the park. To see which part of the park a TU is referring to, please consult Figure 2.

species at risk, endangered Garry Oak meadows and vernal seeps and pools where they occur.

- ❖ Consider wheelchair accessibility in the design of the footpath network.
- ❖ To the extent practicable, employ a footpath design that blends in with surrounding landscape and does not detract from the natural beauty of the site but that, at the same time, does not alter the soils and water flow through the meadows which provide the habitat that sustains the rare plants.
- ❖ In some places in the Central Meadow (TU62), it will be necessary to build short stretches of raised boardwalk over sections of the trail system that become inundated in the winter and spring in order to discourage park users from stepping off into sensitive meadow habitat.

1.5. Formalize footpaths in remaining meadow areas of Uplands Park (TU63; TU64; TU65; TU68; TU69; TU70; TU71; TU72; TU76; TU79; TU80).

- ❖ Design a network of footpaths that provides park visitors with opportunities to appreciate the natural beauty of these areas while reducing pressures on the remaining Garry Oak meadow ecosystems and rare plant species where they occur. This will require decommissioning the many informal trails that cut through meadow habitat and which are leading to a net reduction in the size of the park's Garry Oak meadow ecosystem.
- ❖ Consider wheelchair accessibility in the design of the footpath network.
- ❖ To the extent practicable, employ a footpath design that blends in with surrounding landscape and does not detract from the natural beauty of the site but that, at the same time, does not alter soils and water flow through the meadows.
- ❖ In some places in these meadows, it will be necessary to build short stretches of raised boardwalk over sections of the trail system that become inundated in the winter and spring in order to discourage park users from stepping off into sensitive meadow habitat.

1.6. Erect exclosures around vulnerable communities of rare plants in the park.

- ❖ Build a split-rail exclosure around the vernal pool and seeps in the Eastern Meadow (TU67).
- ❖ Build a split-rail exclosure around the last population of Yellow Montane Violet in the park (TU78).
- ❖ Extend section of fencing at Cattle Point to prevent park visitors from taking shortcuts though one of the largest populations of endangered Bearded Owl-clover in TU91.
- ❖ Identify additional sites within the park that would benefit from exclosures.

1.7. Implement measures to reduce the impact of dogs on sensitive ecosystems and rare plant habitat in both Cattle Point and Uplands Park during the growing season (beginning of October to end of June).

- ❖ Improved controls are needed to reduce a source of significant damage to the rare plants and ecosystems of the park that accompanies the use of meadows and sensitive habitat for exercising dogs.

1.8. Ensure that development permits for properties adjacent to the park safeguard against changes in hydrology in the park.

- ❖ A slight change in the magnitude or direction of winter run-off could have devastating impacts on endangered plant populations which depend on a very specific water regime that can be altered by a change in hydrology caused by new construction adjacent to the park.

1.9. Institute measures to control unauthorized uses of the park.

- ❖ A number of groups use the park for active recreational activities (geocaching, orienteering races) or commercial purposes (dog walking, training classes) without the written permission of the Parks Department as required by Bylaw no. 4672. Enforcing the requirement for these groups to seek permission offers an opportunity to provide these groups with information on the park and how they can minimize impact on its natural values.
- ❖ This will necessitate improving bylaw enforcement in the park.

1.10. Maintain a map of appropriate areas in the park where native trees can be planted.

- ❖ One of the main natural attractions of the park is its open areas of Garry Oak meadows, vernal pools and seeps which put on an outstanding display of spring flowers and are home to the greatest biodiversity and numbers of rare plant species in the park. A major goal of the activities identified in this plan is to prevent a net loss in area of these open areas. The planting of new trees in the park must be sited such that they do not lead to a net reduction in the park's open areas. A map of appropriate areas should be maintained by the Manager of Parks Services to guide the municipality in its tree plantings in the park.
- ❖ A list of trees species appropriate for planting in the park should be maintained by the parks department.

Goal 2—Restore natural areas in those sections of the park with the highest conservation values.

Actions:

2.1. Implement the *2018-2025 Invasive Plant Management Plan.*

- A comprehensive eight-year invasive plant management plan (IPMP) has been developed to coordinate invasive plant removal in both Uplands Park and Cattle Point so that by the end of 2025, the threats posed by invasive non-native trees and shrubs to the park's rare plants and ecosystems will be reduced to levels sufficiently low that subsequent long-term control can be sustained by municipal parks staff and volunteers without additional external support.
- Hire seasonal crews to remove invasive plants from target areas according to the annual action plan for each years of the IPMP.
- Direct municipal arborists to remove invasive trees from woods according to the IPMP.
- Dispose of invasive biomass off site.
- Revegetate areas cleared of invasives with native plants and seeds.
- Hire a part-time restoration biologist / natural areas technician to manage work.

2.2. Assess conservation value and management needs for the wet forests found in the northwestern section of the park.

- Preliminary evidence suggests that imperiled wet forest communities may be present in the northwestern section of the park, but this must be confirmed through a rigorous assessment. An assessment will provide the information to help park managers in their decision on whether to invest the resources in its restoration.

2.3. At the end of eight years (2025), take stock of the invasive plant removal program to determine next steps.

- This will require at a minimum the development of a long-term plan for maintaining treated areas and a renewed commitment of resources for its implementation.

2.4. Complete the inventory and mapping of all the park's 24 rare plant species by 2025.

- This information, which will be reported to the federal and provincial governments, will be useful in designing the trail networks (see actions under Goal 1 above), and provide a baseline for measuring success of restoration activities in the park. The data will help the provincial and federal agencies

track the overall recovery or decline of rare plant species in Canada, and establish funding priorities for recovery activities such as habitat restoration.

Goal 3—Increase awareness among the public about the park's outstanding natural values and how they can help preserve them.

Actions:

3.1. Develop a communications plan for relaying key messages to the public and key stakeholders on Cattle Point and Uplands Park.

- ❖ Develop a colour informational brochure for tourists and other visitors to Cattle Point describing its natural history and how visitors can preserve it for future generations.
- ❖ Develop a similar colour brochure for Uplands Park that includes a map of formal trails that people can use while visiting the park.
- ❖ Provide similar information to neighbourhood schools and colleges (e.g., Willows Elementary, Monterey and Lansdowne Middle Schools, Oak Bay High, GNS) that use the park for educational and recreational purposes.
- ❖ Increase communications with neighbours whose houses border the park to discourage them from dumping garden waste in the park and planting invasive species that can re-infest the park.
- ❖ Consider using QR stickers that can be placed on existing signs that visitors can scan with their phones to obtain more detailed information on the park. This will require creating QR codes/stickers that link to a page on oakbay.ca with the additional information, preparing text and reviewing the text regularly to keep it current.
- ❖ Continue the calendar of regular public outreach events: Tree Appreciation Day (November), community invasive pulls (October), fall presentations to the community on various aspects of the park and updates on restoration activities, publish an article on the park in the local press at least once a year

3.2. Create more effective signage for both Cattle Point and Uplands Park.

- ❖ Reduce the total number of signs in the park by combining bylaw messages onto a single panel.
- ❖ Install visually pleasing "moral suasion" signs at the park's entrances that highlight the outstanding natural values of the park and encourage park users to help protect it by following a few rules of behaviour.
- ❖ Ensure that sign placement does not disrupt vistas or detract from the natural character of the park.

3.3. Continue support for community groups that provide volunteer hours in support of the park and the overall goals of this management plan.

- ❖ Continue supporting Friends of Uplands Park who organize each year many of hundred volunteer hours in support of ecological restoration in the park. These volunteer contributions are an important component in Oak Bay's successful bids for funding from the federal Habitat Stewardship Program to support the restoration work in the park. Friends of Uplands Park also host throughout the year many outreach and educational events that help build community ownership for protecting the park and its natural values.

5.3 Protection of Archeological Resources

Uplands Park encompasses part of what was likely one of the largest pre-contact Coast Salish cemeteries in the region, extending from the village site along what is now called Willows Beach in Oak Bay, north along the entire length of The Uplands, to a large village at Cadboro Bay. A study conducted in 2013 on behalf of the Songhees First Nations (Mathews and Kilburn, 2013) identified 90 funerary petroforms and 17 other cultural features in one section of the park, some dating from more than 1500 years ago. Oak Bay Parks should consult with local First Nations to ensure protection of the park's ancient archaeological features.

Goal 4—Protect the park's archeological heritage.

Actions:

4.1 In consultation with local First Nations, ensure the park's ancient funerary petroforms and other cultural features are protected.

- ❖ Meet with the authors of the 2013 study (Nicole Kilburn of Camosun College and Darcy Mathews of University of Victoria) to establish the best way of protecting these features including a process for consulting local First Nations and a map of the location of the park's archaeological features for use by the Oak Bay Parks Department.
- ❖ Consult local First Nations, and researchers as appropriate, whenever changes to the park's infrastructure are planned to avoid disturbing archeological sites in the park.
- ❖ More actions will arise as our understanding increases.

5.4 Recreational Opportunities

Uplands Park and Cattle Point offer opportunities for visitors to enjoy the great natural beauty of Oak Bay in a unique setting that includes views of islands, mountains and the sea and one the finest examples of Garry Oak woodlands and meadows in the region. Except for boaters, who use Cattle Point's boat launch for access to the sea, most park

visitors use the park's informal trails for passive recreational activities such as hiking, jogging and walking dogs. Preserving the health and integrity of the park's natural environment is therefore an important part of maintaining the park's recreational appeal.

Goal 5—Enhance opportunities for recreation that complement the park's natural values.

Actions:

5.1. Distribute informational materials on Cattle Point to tour bus operators for distribution to their tour guides (see Action 3.1, above).

- These brochures would be laminated for tour guide use and reuse.
- This will require some staff time to identify the main tour bus companies that visit Cattle Point as well as other tour operators and tourist boards (e.g., Tourism Victoria) that provide information to tourists.

5.2. Distribute informational brochures on the park's natural heritage and trail maps for tourists at Uplands Park and Cattle Point (see Action 3.1, above).

- Build and install a single dispenser in each of Cattle Point and Uplands Park (the dispenser could be affixed to existing kiosks). A sign would appeal to tourists to return brochures to the appropriate dispensers when they are done with them.
- Print and distribute 500 brochures (approx. 350 + 150) each year.
- Allocate person hours to check supplies periodically, keep track of numbers used and replenish as necessary.
- Investigate the benefits of developing trail maps for smart phones (e.g., on Google Maps) and report back to Park Services.

5.3. Protect area in the park for community blackberry picking.

- Identify one or two areas in the park where Himalayan Blackberries will be spared from restoration activities in order to allow residents to continue picking berries in the late summer.
- These should be in areas away from rare plants and intact native ecosystems.
- Two candidate sites are the large blackberry patch in the northwest along Midland Road (TU49) and a smaller patch at the Lincoln / Dorset entrance to the park (TU29).

5.4. Consider creating a fenced-off section for off-leash dogs in an area of the park that has already been degraded from an ecological point of view.

- Identify and study candidate sites for their suitability. Two potential sites are: the large field in the northwestern section of the park (TU49) and in the

wooded area of TU50b, once its has been opened up by the removal of its many hundreds of invasive One-seed Hawthorns.

- ❖ Before deciding on a site, the potential impact on street parking in the neighbourhood should be studied.
- ❖ Clear site of invasive shrubs and fence off from adjacent portions of park and adjacent road (Midland Road).

5.5. Install an additional port-a-potty and garbage can at Cattle Point adjacent to the existing port-a-potty to accommodate the increase in tourism traffic.

- ❖ The current single port-a-potty at Cattle Point is reaching its capacity to handle the increased influx of tourists.
- ❖ While the current number of garbage cans appears to be sufficient to handle regular tourists, installing a new garbage can near the port-a-potty, which is heavily used by tourists arriving by tour bus, may help alleviate the littering in the woods behind the port-a-potty.
- ❖ Bus tours may constitute commercial use of the park and may therefore require a permit, in which case permit fees could be used to offset the cost of managing bus tours.

5.5 Park Fire Risk / Fuel Load Management

Decades of wildfire suppression and in-growth by invasive plants, both native and nonnative, have increased the fuel loading of the park to a level where if a fire were to occur it could cause severe damage to the native ecosystems and surrounding houses. Implementing the invasive plant management plan described in Action 2.1 above will contribute to a reduction in the park's fuel load. In addition, the Oak Bay Parks Department maintains firebreaks by mowing dry grassy fields in July each year and brushing cutting along the main fire routes into the park to keep them open. The Oak Bay Fire department maintains three fire hydrants in key locations that allow its hoses to reach all sections of the park. To the extent possible, fire control methods should be conducted in a way that minimizes damage to the park's rare plants and ecosystems.

Goal 6—Manage fire risk in the park while minimizing damage to the park's rare plants and ecosystems.

Actions:

6.1 Continue the program of mowing meadows (TU70, TU69, TU71, TU&7 and TU49) in mid- to late July to reduce the risk of fire created by stands of dried grasses.

- ❖ Coordinate with the park's restoration practitioner / botanist to determine the best time to mow to allow seeds of native flora to fully ripen and shed their

seeds, and allow him or her to mark off any sensitive areas that should not be mowed.

- ❖ Institute a protocol for tractor mowers to clean blades and wheels before moving to a new area to prevent the spread of noxious weeds within the park and between the park and other areas of Oak Bay.
- ❖ Produce a map of rare plant habitat at Cattle Point for municipal parks crew to avoid when they are weed whacking around benches, mowing grassy fields during the dry season and maintaining open fire truck routes.

6.2 Continue the program of annual brush cutting to widen the fire routes through the park to maintain vehicle access.

- ❖ Coordinate with park's restoration practitioner / botanist to determine best timing to allow seeds of native flora to fully ripen and shed their seed, and allow him or her to mark off sensitive areas to avoid.
- ❖ Institute a protocol for brush cutters to clean blades before moving to a new area to prevent the spread of noxious weeds within the park and between the park and other areas of Oak Bay.

6.3 Update information package for Oak Bay Fire Department on how to limit damage to sensitive rare plant habitat in the event of extinguishing a fire in the park.

- ❖ This would apply to meadow areas with vernal pools and high numbers of rare plants (i.e., TU62, TU67, TU75)
- ❖ Such a map has been provided in the past for TU62 but may soon require updating to include other areas.
- ❖ Organize a walk through the park with the fire chief every three years or so.

6 Implementation

Management of Natural Areas	
Short Term (= 1 – 3 years)	1.1 Design and install formal footpaths at **Cattle Point**, including boardwalks over flooded paths
Short Term	1.2 Establish a vantage point for tourists/tour buses at **Cattle Point**
2020	1.3 Close off **Uplands Park**'s Central Meadow during wet season
2019 & 2020	1.6 Erect exclosures around vulnerable communities of rare plants in the park.
Short Term	1.7 Implement measures to reduce the impact of dogs on sensitive ecosystems and rare plant habitat in both **Cattle Point** and **Uplands Park** during the growing season (beginning of October to end of June)
Short Term	1.9 Institute measures to control unauthorized uses of the park
Ongoing	1.10 Maintain a map of areas in the park where trees can be planted
Ongoing	2.1 Implement *2018 – 2025 Invasive Plant Management Plan*.
2019	2.2 Assess conservation value and management needs for the wet forests found in the northwestern section of the park
Short Term	3.1 Develop communications plan for relaying key messages to the public and key stakeholders on **Cattle Point** and **Uplands** Park
2019	3.2 Create and install more effective signage for both **Cattle Point** and **Uplands Park**
Ongoing	3.3 Continue support for community groups provide volunteer hours in support of the park and the overall goals of this management plan
Mid Term (= 4 – 6 years)	2.4 Complete the inventory and mapping of all the park's 24 rare plant species by 2025
Mid Term	1.4 Formalize footpaths in the three rare-species-rich meadows of **Uplands Park** (TU62, TU67, TU75)

Management of Natural Areas	
Mid Term	1.8 Ensure that development permits for properties adjacent to the park safeguard against changes in hydrology in the park
Long Term (= 7 – 10 years)	2.3 Take stock of the invasive plant removal program to determine next steps. At a minimum, a schedule for maintaining treated areas of the park free of invasive plants would need to be developed and resources. Depending on the assessment, a new 8-year IPMP might be developed.
Long Term	1.5 Formalize footpaths in remaining Garry Oak meadow areas of **Uplands Park** (TU69, TU79; TU65; TU64; TU63; TU70; TU80)

Protection of Archeological Heritage	
Ongoing	4.1 In consultation with local First Nations, ensure the park's ancient funerary petroforms and other cultural features are protected

Recreational Opportunities	
Ongoing	5.1 Distribute informational materials on **Cattle Point** (see Action 3.1, above) to tour bus operators for distribution to their tour guides
Ongoing	5.2 Distribute informational brochures with information on the park's natural heritage and trail maps for tourists at **Uplands Park** and **Cattle Point**
Ongoing	5.3 Protect area in the park for community blackberry picking
Short Term (1 – 3 years)	5.5 Install additional port-a-potty and garbage can at **Cattle Point** adjacent to existing one to accommodate increase in tourism traffic
Mid Term (4 – 6 years)	5.4 Consider creating a fenced-off section for off-leash dogs in the park

5.4 Fire Risk / Fuel Load Management	
Ongoing	6.1 Continue program of mowing meadows (TU70, TU69, TU71, TU&7 and TU49) in mid- to late July to reduce risk of fire created by stands of dried grasses
Ongoing	6.2 Continue program of annual brush cutting to widen the fire routes through the park to maintain vehicle access.
Ongoing	6.3 Update information package for Oak Bay Fire Department on how to limit damage to sensitive rare plant habitat in the event of extinguishing a fire in the park.

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Appendix

Rare Plants of Uplands Park and Cattle Point					
English Name	Scientific Name	SARA Status	BC Status	Global Status	Uplands Park
Banded Cord-moss	*Entosthodon fascicularis*	Special Concern	Blue	G4/G5	Present
Bearded Owl-clover	*Triphysaria versicolor* ssp. *versicolor*	Endangered	Red	G5T5	Present
Bear's-foot Sanicle	*Sanicula arctopoides*	Endangered	Red	G5	Extirpated
Bigleaf Lupine	*Lupinus polyphyllus* var. *pallidipes*	—	Red	G5T3T4	Present
Carolina Meadow-Foxtail	*Alopecurus carolinianus*	—	Red	G5	Present
Coast Microseris	*Microseris bigelovii*	Endangered	Red	G4	Present
Scouler's Catchfly	*Silene scouleri* ssp. *scouleri*	Endangered	Red	G5T3T5	Extirpated
Dense Spike-primrose	*Epilobium densiflorum*	Endangered	Red	G5	Present
Erect Pygmyweed	*Crassula connata var. connata*	—	Red	G5TNR	Present
Foothill Sedge	*Carex tumulicola*	Endangered	Red	G4	Present
Geyer's Onion	*Allium geyeri* var. *tenerum*	—	Blue	G4G5T3T5	Extirpated
Graceful Cinquefoil	*Potentilla gracilis var. gracilis*	—	Blue	G5T5	Present
Heterocodon	*Heterocodon rariflorum*	—	Blue	G5T5	Present
Howell's Triteleia	*Triteleia howellii*	Endangered	Red	G4	Extirpated
Kellogg's Rush	*Juncus kelloggii*	Endangered	Red	G3	Present
Macoun's Meadowfoam	*Limnanthes macounii*	Threatened	Red	G2	Present
Mountain Sneezeweed	*Helenium autumnale* var *montanum*	—	Blue	G5T3T5	Present
Muhlenberg's Centaury	*Zeltnera muehlenbergii*	Endangered	Red	G5	Present
Nuttall's Quillwort	*Isoetes nuttallii*	—	Blue	G4?	Present
Poverty Clover	*Trifolium depauperatum* var. *depauperatum*	—	Blue	G5T5	Present
Purple Sanicle	*Sanicula bipinnatifida*	Threatened	Red	G5	Present
Spanish-clover	*Acmispon americanus* var. *americanus*	—	Blue	G5T5	Present
Tall Wooly-heads	*Psilocarphus elatior*	Endangered	Red	G4Q	Present
Twisted Oak Moss	*Syntrichia laevipila*	Special Concern	Blue	GNR	Present
Victoria's Owl-clover	*Castilleja victoriae*	Endangered	Red	G1	Extirpated
Water-plantain Buttercup	*Ranunculus alismifolius* var. *alismifolius*	Endangered	Red	G5T5	Present
White-top Aster	*Sericocarpus rigidus*	Special Concern	Red	G3	Present
Winged Water-starwort	*Callitriche marginata*	—	Blue	G4	Present
Yellow Montane Violet	*Viola praemorsa* ssp. *praemorsa*	Endangered	Red	G5T3T5	Present