**Subject:** 

FW: URGENT & IMPORTANT: CRD Role as Manager and Steward of Gonzales Hill

Regional Park and the Adverse Impacts of the Proposed Lot Development

**Attachments:** 

CRD Parks Stewardship Letter\_v4.pdf; ATT00001.htm; P-Webding.png; ATT00002.htm

Importance:

High

From: Brad Atchison

Subject: URGENT & IMPORTANT: CRD Role as Manager and Steward of Gonzales Hill

Regional Park and the Adverse Impacts of the Proposed Lot Development

Date: February 16, 2018 at 2:23:12 PM PST

CRD Parks Committee Members,

Regarding legal, management, and stewardship obligations that the Regional Parks and Environmental Services Department and the CRD Parks Committee have regarding a proposed house lot development abutting Gonzales Hill Regional Park...

Whereas, the position of the CRD has been neglectfully hands-off and inactive regarding these roles and the adverse ecological and cultural impacts of this proposed development (with or without variances), the CRD needs to assume its management and stewardship responsibilities, including to best practices standards.

Continued inaction by the CRD is no longer acceptable or desirable to our Neighbourhood, especially in the CRD's capacity as the manager and steward of this Park.

By-the-way, my wife and I are the individual property owner which is most impacted by this proposed development, and we are willing to be "harmed" (effectively moving this 5-storey, human-made vertical profile 66 feet closer to our home!) to support the broader public good and principle of ecosystem preservation (especially of a declining, rare, degraded, but intact Garry oak ecosystem in an urban setting) and proactive, Park management.

Attached is a 14-page (including appendices) rationale for our detailed position, including the foundational science and nuances to support our position. We would hope that each Parks Committee member (regardless of which municipality you reside in or represent) takes the time to carefully read and digest this necessarily-lengthy document. We expect the Committee to actively listen to our presentation and to recognize the merits of integrating this lot into the existing Park. Gonzales Hill Regional Park is the only CRD park within the City of Victoria. Several funding mechanisms within and outside of the CRD are available to move this issue to a satisfactory resolution for all parties concerned, including the owner of this lot.

We expect to make our representation at the CRD Parks Committee Meeting on Feb. 21, 2018 at 9:30am, and to be allowed the necessary time to do so.

Respectfully, Brad Atchison and Cheryl Shoji

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### **BRAD ATCHISON & CHERYL SHOJI**

February 14, 2018

Attention: CRD Parks Committee Chair David Screech 625 Fisgard Street Victoria, B.C. V8W 1R7

#### VERY URGENT AND IMPORTANT

Re: CRD as Manager and Steward of Gonzales Hill Regional Park

Dear CRD Parks Committee:

1.0 CRD Parks Committee and CRD Board and Their Inactive Position To-Date on the Proposed Madro Lot Development (With or Without BOV<sup>a</sup> Variances)

As the *most impacted Gonzales Hill Neighbour by this proposed Madro house development,* adjacent to Gonzales Hill Regional Park (GHRP, or the Park), my wife and I are willing to "harm" ourselves maximally by not supporting any of the five requested variances...effectively pulling the house westward 66 feet closer to our property. The reason is simple and scientifically-valid: We support the broader principle of preserving an existing intact, contiguous, and rare Garry oak ecosystem, b,c,d especially its role in biodiversity protection and climate change mitigation and adaptation.

Apparently, the CRD was notified by the BOV, as an "adjacent neighbour", that such a development was occurring, although the initial CRD contact by the Madros was for egress over CRD property to/from the parking lot to their property. The reasons the CRD turned down this request were two-fold:

- A loss of one parking stall, which could have been solved with a herringbone parking pattern, with the result of an *increase in parking stalls*.
- Interestingly and importantly, the CRD indicated that there would be an ecosystem disturbance by going over part of the intact ecosystem which has no Garry oaks. We agree with this reason.

BOV refers to the City of Victoria Board of Variance process.

The Garry oak (Quercus garryana) is the only native oak species in British Columbia. This tree is also drought-tolerant, which is an important survivability factor under projected climate change conditions in the Victoria area. Parks Canada states that Garry oak woodlands support more species of plants than any other terrestrial ecosystem in British Columbia. In Oak Bay, a fine of up to \$10,000 may be issued for each Garry oak tree cut or damaged....In Victoria, by contrast, there is no fine and, as a result, there is a gradual and continual loss of Garry oaks within this B.C. municipality.

The Gary oak ecosystem (GOE) is considered one of Canada's most endangered ecosystems, according to the Garry Oak Ecosystem Recovery Team/GOERT (2011).

Garry oak ecosystems are red-listed ecosystems in B.C. and Canada, supporting high numbers of blue- and red-listed species of flora and fauna (Reference: Gonzales Hill Regional Park Study Site - Restoration of Garry Oak Ecosystem. Bonenfant, Nadia. 2007).

On another relevant note, the CRD has also been previously approached by a Gonzales Hill ratepayer within the last year or so to have the CRD purchase the advertised lot but refused.

The reluctance by the CRD Parks Committee, the CRD Parks and Environmental Services Department, the District of Oak Bay, and, to a lesser extent, the City of Victoria to get engaged on the adverse impacts of the proposed Madro lot development on GHRP has mobilized the Gonzales Hill Neighbourhood, which to-date has not had its legitimate concerns heard. No CRD senior parks representative has occurred to meet with any of the impacted property owners or the Gonzales Hill Neighbours-at-large. Specifically, the CRD taken a "hands-off" approach on the unsuitability, in several material regards, connected not only to any development of this lot, but also it has chosen to idly stand by and not take a position on any of the variances, which directly and adversely impact the survivability and long-term viability of this Garry oak ecosystem. The Madro variance requests are excessive and frivolous. As well, the highly-intrusive design was presented as a fair accompli well before any Neighbourhood concern surfaced (Our solutions-oriented group is known as the "Concerned Neighbours for Gonzales Hill Regional Park").

All comments throughout this report are **specifically** directed toward the under-management and lack of stewardship of Gonzales Hill Regional Park, lying within the jurisdiction of the CRD parks portfolio.

#### 2.0 Background and Context to Our Legitimate Concerns to the Madro Lot Development

The CRD bought Gonzales Hill Regional Park (GHRP), including the historic Gonzales Observatory, for \$35,000 in 1987 from the Federal Government who wanted to carve off private lots and sell them. The Gonzales Neighbourhood successfully fought off that ill-considered effort. Since then, the CRD (i.e., its Board, the CRD Regional Parks Committee, and the CRD Parks and Environmental Services Department) has significantly undermanaged this only regional park within the City of Victoria:

- Neglectfully, the CRD does not follow its own Regional Parks Strategic Plan: 2012-2020 in numerous material regards (more about this in Section 2.0: GRD Failure to Follow its Regional Parks Strategic Plan - 2012 to 2020).
- In our email and telephone contacts to-date with the CRD Regional Parks Committee Chair and the Parks and Environmental Services Department Head, all contacts have been met with rebuffs and a continued rationalization for the CRD's unwillingness to get involved with the Madro lot development (with or without variances). The CRD stance expressed was, firstly, it was satisfied with the position taken regarding this lot development and, secondly, that there was no impact on park users. Yet, no dedicated site visits or analyses were done on this proposed Madro lot project, no Neighbourhood contacts were initiated, no Neighbourhood meetings were held, and no surveys conducted with parks users or the Gonzales Hill Neighbours.
- Regarding its own published *Parks Annual Plans*, in the first five-year period (2012-2016) of the tenyear *Regionals Park Strategic Plan*:
  - o The CRD did no projects for or within GHRP in 2012, 2014, 2015, or 2016, Nada...nothing! The only year it did any work was in 2013: only one project consisting of trail improvements, a short cedar fence, and concrete steps and a railing down from the south side of the Observatory. This project was budgeted for \$8,000 and cost \$13,593...a 70% cost over-run

...hardly an exhibition of prudent project management or "best management practices", as the organization routinely refers to in various foundational planning documents.

(Refer to Appendix A: Number of Projects in CRD Regional Parks - 2012 to 2016 for a summary of projects within CRD parks for the first five years of the CRD Regional Parks Strategic Plan)

While Gonzales Hill Regional Park was being neglected and under-managed, the other parks in its portfolio, particularly those situated in the western and northern part of the CRD received approximately \$21 million of funding for parks maintenance and improvement over the 2012-2016 period...a large imbalance when it comes to our City's only regional park!

- o After acquiring GHRP in 1987, the CRD has ignored the regular clearing of brush and invasive species (especially highly-flammable Scotch broom, or Cytisus scoparius). The CRD continues to ignore these routine maintenance activities, as discarded gardening debris and brush accumulate, making the substantial amount of flammable biomass a fire risk to immediate homeowners. A flash-fire razed the southern slope of Gonzales Hill in the 1960s.
- The sensitive Garry oak ecosystem within Gonzales Hill Regional Park has been described by experts since the *early 1990s as a "badly-degraded ecosystem"*, requiring significant remediation efforts. Yet, the CRD continues to ignore the need to remove invasive species or carry out Garry oak ecosystem remediation and restoration efforts. The Garry Oak Ecosystem Recovery Team (GOERT) and its volunteers received Federal funding to collect and seed the Park with native plants for a period of time but the funding ultimately lapsed. It should be pointed out that this was not an effort initiated by the CRD, although it assisted with the project's execution.
- The proposed Madro lot development will result in the removal of 45% to 100% (i.e., up to 18 trees) of a Garry oak stand in the southwest corner of the lot. Any private lot development directly abutting GHRP, which is part of a "Conservation Area", as defined in the CRD's Regional Parks Strategic Plan and CRD Regional Parks Annual Plans is:
  - a "special ecological high-risk case"; and
  - There should be no debate about these two important facts, including in light of climate change adaptation and mitigation as well as the maintenance of biodiversity within this Park and Madro lot, which are part of the integrated Garry oak ecosystem. B.C.'s Garry oak ecosystems have almost entirely disappeared since before European colonization and modern urbanization, and are now down to about 5% of their original distribution (Refer to Appendix B: Distribution of Garry Oaks 1800 to 1997, which highlights how dire and dramatic the decline in this one species alone has been over the last 200-plus years, with most of the ecological impact since WW II.).
- To some folks, at least \$400,000 worth of blasting, as proposed for the Madro lot development, is only of inert rock and, at the same time, *ignores the spiritual nature* of this ancient and spiritual landform as well as its panoramic vantage point within the City of

A CRD "Regional Conservation Area", as defined in the CRD Regional Parks Annual Plans, is a significant sensitive and threatened ecosystem (such as a Garry oak ecosystem), containing rare or endangered plant and wildlife species and their supporting ecosystems. The size of a Regional Conservation Area should be sufficient to ensure that natural features can be protected and remain viable over the long-term. GHRP's Garry oak ecosystem clearly meets this definition. Other CRD designations for categorizing its regional parks include: "Wilderness Area", "Natural Area", and "Recreation Area".

- Victoria. Once this promontory is blasted away, it's gone forever. This possibility should not make anyone rest easy in their heart...Potentially long-lasting benefits for Parks users and the health of the planet's climate systems and biodiversity are being sacrificed for the sake of the Madros who ignore these values to produce a pile of rubble which gets carted away.
- Regarding Gonzales Hill Regional Park, it is ironic that the CRD Parks and Environmental Services Department" uses the phrase "environmental services" in its name and, at the same time, has been largely absent in the stewardship of this Park, especially when:
  - staffing resource constraints are used by the department head as the rationale for continued inaction (e.g., ignoring the necessity for an Environmental Impact Assessment, or EIA, to determine the effect of any proposed Madro lot development on GHRP; a baseline assessment and inventory of flora and fauna species; the state of the Garry oak ecosystem; a cultural study; a survey of and meeting with park users, etc.); and
  - other parks within its jurisdiction have received \$10s of millions for operations, projects, and facilities planning.
- Section 3.0: CRD Failure to Follow its Regional Parks Strategic Plan, which follows, outlines 26
  specific areas where the CRD Parks Committee and the Parks and Environmental Services
  Department has neglected to implement its Strategic Planning Goals and Priorities.
- As a post-graduate Biologist who has watched the subtle movement patterns of various animal, bird, and insect species as well as wildflowers within Gonzales Hill Regional Park and the dynamic ebb-andflow of the ecosystem, itself, on a daily basis for 29 years, the author has seen first-hand what impacts this lot development will have on the vitality and integrity of this ecosystem. It is also obvious that the immediate Neighbourhood knows that this construction project, with its huge amount of prolonged rock blasting of the ancient promontory (a hard Wark Kneiss metamorphic rock with glaciation-caused rock striations and roche-moutonnee), with spiritual significance to many of us as well as the First Nations), will impact the Garry oak ecosystem on Gonzales Hill. As well, the Garry Oak Ecosystems Recovery Team/GOERT, a group of highly-qualified foresters, biologists (including environmental consultants, field ecologists and other biologists, Environmental Impact Assessment professionals, and botanists with expertise in rare plant species and the spiritual and medicinal properties of various plants, including within Garry oak ecosystems) also recognizes that every tree cut within a Garry oak ecosystem has now become critical to the integrity of these last stands of indigenous forest as well as to meet climate change mitigation and adaptation targets in urban settings. To the Madros and Zebra Design, rocks are only "rubble" and a Garry oak is only a tree blocking their view, direct sunlight, or access to their home.
- Furthermore, the CRD has legal obligations and responsibilities in being proactively involved in managing Gonzales Hill Regional Park to a professional standard, as specified in the:
  - o B.C. Local Government Act (RSBS 2015; Chapter 1:
    - Purposes of regional districts: Section 185 Recognizing that regional districts are an
      independent, responsible and accountable order of government within their
      jurisdiction, the purpose of a regional district include (a) providing good government

- for its community, (c) providing for the stewardship of the public assets of its community, and (d) fostering the current and future economic, social, and environmental well-being of its community.
- Continuation of regional parks and trails: Section 191 (1) The repeal of the Park (Regional) Act does not alter or cancel any interest in, a right to or the park status of regional parks and regional trails set aside and dedicated under that Act?
- Capital Regional District Bylaw No. 2419 (A Bylaw to amend Bylaw No. 1749, Being Regional Parks Extended Service Establishment Bylaw No. 1, 1989, Amendment Bylaw No. 1, 1996), which covers the legal responsibility for Gonzales Hill Regional Park, as specified in the CRD Electoral Area of Victoria?

#### 3.0 CRD Failure to Follow its Regional Parks Strategic Plan: 2012-2020

There are far-too-numerous examples of CRD implementation shortcomings regarding this important foundational governance document, which should direct the efforts of CRD Parks staff to operationalize the CRD Regional Parks Strategic Plan, in acting as a professional, prudent, and proactive stewardship of GHRP:

- The CRD routinely uses catch-phrases such as "best management practices", "conservation", "stewardship", "sustainability", "biodiversity and ecosystem health", "environmental protection", "climate change", and "healthy communities" in its documentation and its aspirational vision for regional parks, without attempting to meet the management, stewardship, and practice standards embedded and inherent in these words and phrases, regarding the CRD's responsibility for GHRP.
- Applying "best practices" involves visionary leadership at the CRD Board and departmental level in themanagement of the CRD regional park portfolio assets, specifically dealing with GHRP, as exemplified by the following tenets:
  - The key decision-makers in the CRD, from governance down to parks administration and operations, need to fully comprehend and be able to apply the concepts, principles and practices of Ecosystem-Based Management (EBM) and Ecosystem-Based Adaptation (or EbA), especially for developed and CRD Conservation Area-designated parks in urban settings or Wilderness or Conservation Area-designated parks at the edge of the CRD municipalities. Although EBM was originally developed in a strictly ecological context (specifically, marine ecosystems) and was then transposed to agriculture and forestry, it now has urgent applicability for climate change mitigation and adaptation. Mitigating climate change is a very important and urgent imperative in dealing with land use issues within the CRD. The proposed Madro lot development is one of many important front-lines and is a metaphor in this fight to claw back climate stability and stabilize the loss of biodiversity.

Individually and collectively, CRD Directors have a fundamental responsibility for the oversight of the implementation of the Regional Park Strategic Plan as well as for the governance of the organization. Effective and visionary CRD leadership does not ignore these responsibilities or any legitimate Neighbourhood concerns and suggestions. In this regard, some CRD municipalities have been rapidly cutting down and paving over their forests and green belts/corridors in the grab for tax revenue and in the short-sighted guise of economic development and growth strategies. This approach to municipal "growth" and "progress" is arguably another example of irresponsible and short-sighted governance by municipal Councils (The pursuit of these types of fossil-fuel, GDP-dependent economic activities are anachronistic and carbon footprint-impactful, which, again, do not represent visionary leadership, but this is another discussion for another time.).

- o In the spirit of transparency and accountability, the CRD does not publish any Report Card on its performance in managing its respective portfolios, including regional parks...again, hardly, "best practices". The CRD Parks Annual Plans do not presently serve these objectives.
- O There are no "measurable outcomes" articulated as the logical end-point in the development of any strategic planning effort, which befits "best practices". These measurable outcomes then serve as performance metrics to gauge the performance by operational management of the degree of implementation of the CRD Strategic Plan. These measures also serve an important accountability function. As a result and in the absence of measurable outcomes, the activities listed and published in each CRD Parks Committee Annual Plan are merely a catalogue of projects carried out, with no direct linkage between these activities and measurable outcomes in the Regional Park Strategic Plan, or how CRD Parks is performing over any particular time period in terms of its management and stewardship obligations.
- Regarding Gonzales Hill Regional Park, between 2012 to 2016, the CRD has ignored 10 of the 14
   Strategic Goals in the Strategic Plan...a 71% failure rate! Here are some of the CRD Strategic Goals
   (pp. 92-97) and Strategic Priorities (p. 102) ignored, in every material way, the stewardship of GHRP, specifically in these 19 important areas articulated in the CRD Regional Parks Strategic Plan:
  - o "...protects the diverse range of ecosystems and species of the capital region, including ecosystems and species identified as most at risk of disappearing."
  - "...establish...adequate buffers from uses and activities on adjacent lands...".
  - "...protect and conserve biological diversity and give rare, threatened or endangered species special management attention.".
  - "...maintain and restore healthy, viable ecosystems in regional parks...".
  - o "...minimize the negative impacts of human activities on the natural environments of regional parks...".
  - o "...remove non-native invasive plants and animals.". "...undertake research and management activities that improve the understanding of parks ecosystems and the ability to sustain them."
  - o "...employ best management and sustainability practices as part of Regional Parks' environmental ethic in all aspects of managing and operating regional parks...".
  - "...employ best land-management practices that conserve natural resources, promote biodiversity and contribute to reducing greenhouse gases." Ignoring this strategic priority has dire consequences.
  - "...respond, adapt and prepare for climate change impacts." Again, inaction will lead to highlyimpactful adverse, and likely-irreversible, results.
  - o "To meet these goals, Regional parks will incorporate environmental conservation, stewardship, partnership...in all aspects of parks...management and operation."
  - "...two cornerstone concepts: conservation and stewardship".
  - "Conservation prevents their depletion (i.e., of living organisms and their vital processes, exploitation, destruction)...".
  - "Stewardship means caring, thoughtful and cautious management of the land and associated natural and cultural values, and passing on healthy ecosystems to future generations." Fact: the biological diversity and ecological integrity of Gonzales Hill Regional Park and its Garry oak ecosystem continues to degrade under CRD management.
  - "Strengthen the existence of existing parks".
  - "Strengthen community involvement and partnership".
  - "Promote the park's health benefits".
  - "Engage in planning for regional sustainability".
  - o "Cultivate partnerships and explore new approaches and adopt best practices and technologies".

CRD Regional Parks indicated it intended to use these Management Goals to "assist in daily decision-making" and as a "framework for developing detailed operational plans".

• The northern (adjacent to the Madro lot) and western portions of Gonzales Hill Regional Park, with its Garry oak ecosystem havfe not been catalogued as a "Regional Park Conservation Area" in the CRD Regional Park Strategic Plan or any CRD Parks Committee Annual Plans as a Garry oak ecosystem, although the other parks in its portfolio have (such as Albert Head Lagoon, Ayum Creek, Brooks Point, Devonian, Francis/King, Island View Beach, Lone Tree Hill, Mill Hill, Mount Wells, and Witty's Lagoon).

#### 3.1 Lack of Transparency in CRD Parks Financial Reporting: 2012-2016

There has been a dramatic reduction in the level of CRD Parks and Environmental Services Department financial detail provided on the CRD's web site and in one-easily-accessible area of the site, especially since 2013 onwards.

- The lowering of the standards for financial reporting for the revenue allocated, operations and capital expenditures of CRD regional parks between 2012 and 2016 resulted in less net transparency and accountability for the performance of the CRD Parks and Environmental Services Department. Even when reviewing financial reporting in the CRD Parks Annual Plans or 2012-2016 Parks Capital Expenditure Plan, financial information exists on a scattered, or piecemeal, basis, and not in any one place or in any one set of financial documents, regarding the operations, facilities planning, and uses and sources of capital in regional parks. As well, the CRD Annual Statements of Financial Information are not published by department (and by departmental sub-functions in more detailed schedules), making vertical analysis difficult to do, and, thus, an assessment of CRD Parks departmental economy, efficiency, and effectiveness by CRD ratepayers is also difficult to gauge.
- The CRD 2012 2016 Capital Infrastructure Plan identifies new capital projects with an estimated cost of \$21 million. This is based on upgrading existing infrastructure and providing new infrastructure to open park and trail reserves. The major infrastructure projects are the E&N Rail Trail Humpback Connector, opening part of the Sea to Sea Green Blue Belt and Sooke Hills Wilderness regional park reserves, opening the Trans Canada Trail and Matthews Point regional park reserves, and upgrading existing infrastructure at Thetis Lake and Elk/Beaver Lake regional parks. As mentioned, only one small CRD project occurred in Gonzales Hill Regional Park over this period.

  (Refer to Appendix C: CRD Regional Parks Allocated Revenue and Expenditures 2012-2016 for a highlight of when and where the financial reporting for the Parks and Environmental Services Department became sub-standard from the point of view of transparency and accountability to the public.)

#### 4.0 Importance of Green Space and Conservation Areas in an Urban Setting

These four "free ecosystem-provided services", which follow, are provided by Gonzales Hill Regional Park, but only if managed to a meaningful best practices standard by the CRD. These services and benefits can also be quantified as long-term park user and ecological resiliency benefits:

<sup>&</sup>quot;Free ecosystem services" are productivity services provided by biological processes within any ecosystem which have an attributable economic value but which are not typically factored into costed financial benefits in traditional economic theories. Only ecological economics concepts and principles account for these free services produced by ecosystems.

Geothermal evidence for deforestation induced warming: Implication for the climactic impact of land development. Lewis, Trevor J. and Kelin Wang. Geophysical Research Letters, vol. 25, no. 4, pp. 535-538 (February 15, 1998).

h The effect of deforestation on ground surface temperatures. Lewis, Trevor. Global and Planetary Change, pp. 1-13 (1998).

Primary Production

This long-recognized benefit of trees, as the "lungs of our planet" absorbing  $CO_2$  and producing  $O_2$  is a fundamental and vital, or life-producing, atmospheric purpose. In addition, trees are instrumental in supporting biological services such as nutrient recycling and soil formation.

Carbon Sequestration and Climate Change Mitigation:

Keeping *every*, especially indigenous, healthy tree, is vital in an urban environment to capture and sequester carbon to mitigate climate change impacts. In addition, net zero emission CRD buildings and LEED standards should be mandatory practices to adopt in the constructional of all CRD buildings and projects.

Scientific evidence also indicates that land development projects involving deforestation cause permanent increases of 1° to 2° C. in ground surface temperature, also propagated downward (affecting soil communities) at sites where trees have been cut. Deforestation also causes warming over a much larger region than just those that are site-specific. 8. The CRD and its 13 municipalities in the region should be leaders, particularly in urban reforestation, instead of enabling continuing and accelerating efforts by developers and road transportation projects to cut down forests and individual trees. Arguably, such deforestation efforts are steps backward in the quality of life and progress of our regional communities.

Our urbanized regional municipalities are "Urban Heat Islands", absorbing and trapping heat within the atmosphere. Protecting our existing tees and forests and planting many more trees are significant mitigation and adaptation activities to offset some of the worst effects of anthropogenic climate change.

• Climate Change Adaptation:

The Garry oaks and other tree species, including large, properly-pruned Douglas firs (Pseudotsuga menziesii) on immediate property lots, are necessary to slow down the very high winds which Gonzales Hill presently experiences and will continue to experience with more ferocity, greater frequency, and duration under climate change simulations and modelling. In addition, cutting down a substantial number of trees in a stand, as at least proposed with the Madro development, would make it difficult for the remaining trees to withstand high winds.

Our urban forests also protect micro-climates and their related ecological diversity.

Energy Savings

The GHRP Garry oak forest and other large tree species on immediate property lots act collectively to reduce heat loss from the houses in cooler periods and a need for cooling in the summer. The trees also deflect the high winds in the area.

Houses within an urban forest are about 8° cooler in summer compared to other non-canopied residential areas or 14° cooler than industrial areas within a city.¹

- Spiritual Values and Beneficial Health Impacts, Including Attached to an Ancient, Spiritual Landform:
   There is emerging, accumulating, and stunning evidence of the medical benefits, including cardiopulmonary health, of preserving (i.e., retaining) and expanding treed areas, especially in urban settings:
  - o Reducing atmospheric pollutant toxicity, including particulate filtering. <sup>1</sup>

Ground temperature data from a study in Ville St-Laurent, Quebec (June 2005).

Red and Green: How a Green Milieu Benefits Cardiovascular Health, paper presented by Reeves, Francois. Canadian Urban Forest Conference (October 2, 2014).

How an Unhealthy Environment Leads to Heart Disease. Reeves, Francois, MD (Cardiology). Greystone Books (2014).

An Association Between Air Pollution and Mortality in Six U.S. Cities. Dockery, Douglas, Sc.D., C. Arden Pope III, Ph.D. et al. The New England Journal of Medicine, vol. 329, no. 24 (December 9, 1993).

- Reduction in human mortality rates.<sup>1</sup>
- o Reduction in cardiopulmonary as well as cardiovascular disease and lung cancer with improved in air quality. I,m,n
- Enhancing the physiological effects and benefits of Sinrin-yoku (also known as "forest atmosphere or forest bathing") on autonomic nervous system, endocrine, immune system activity.<sup>o</sup>
- Reduction in heart pulse as well as heart rate.°
- Enhancement of aesthetics for Gonzales Hill Regional Park users.

Among other benefits, the CRD and the 13 regional municipalities with its remaining trees and forests should be branded as a world-class "Cardio-Protective Region", promoting a green and active milieu. A goal should be set for a specified percentage of tree canopy by 2025...by 2030...by 2040...and so on.

#### • A Natural Asset and Biodiversity Repository:

Garry oak ecosystems, which are indigenous to the southern and eastern portions of Vancouver Island, are unusual for the amount of biodiversity they contain, including rare as well as spiritual and medicinal plants to the local First Nations (i.e., the Songhees/Esquimalt Nations, in this region). They can be regarded as "Biodiversity Islands". More than 40% of the federally-listed at risk species in Canada occur in Garry oak ecosystems. As previously mentioned, only 5% of these Garry oak forests remain and require urgent attention by CRD Parks to "do their part" to preserve all remaining trees; for example:

- o large trees within GHRP are used for nesting by several bird species, for bark foraging by a variety of insects by woodpeckers including within the Madro lot, and as perches by birds of prey (including the bald eagle, or *Haliaeetus leucocephalus*; barred owl, or *Strix varia*; and peregrine falcon, or *Falco peregrinus analum*).
- the proposed Madro driveway will disrupt the Garry oak forest corridor connecting the southern and northern portions of GHRP, exposing California quail (Callipepla californica) to predation by raptors.

Schedule 1 of the Federal Species at Risk Act <sup>q</sup> specifies 37 individual species within Garry oak ecosystems. It is also clear that this legislation provides for a holistic, multi-species "ecosystem approach", in recovery efforts for any Garry oak ecosystem. This integrated approach to preserving the Garry oak ecosystem within, adjacent to, and within the vicinity of immediate property owners of Gonzales Hill Regional Park particularly captures the proposed Madro lot development because of its significant adverse impacts (particularly the amount of proposed blasting and the number of Garry oaks, including saplings, to be cut). At least one rare plant species, twisted oak moss (Syntrichia laevipila) has been identified within this ecosystem, although the full extent of its occurrence has not been documented. No rigorous scientific inventory of species has been conducted to-date within the GHRP or the Madro lot.

An Association Between Air Pollution and Mortality in Six U.S. Cities. Dockery, Douglas, Sc.D., C. Arden Pope III, Ph.D. et al. The New England Journal of Medicine, vol. 329, no. 24 (December 9, 1993).

m Particulate Matter Air Pollution and Cardiovascular Disease, an Update to the Scientific Statement from The American Heart Association (2004; 2010).

The environmental burden of disease in Canada: Respiratory disease, cardiovascular disease, cancer, and congenital affliction.

Boyd, David R and Stephen J. Genius. Environmental Research, 106: 420-249 (2008).

The physiological effects of Shinrin-yokun (taking in the forest atmosphere or forest bathing): evidence from field experiments in 24 forests across Japan. Park, Bum Jin, Yuko Tsunetsugu et al. Environmental Health and Preventative Medicine, 15: 18-26 (2010)

P Chapter 4: Species and Ecosystems at Risk, in Restoring British Columbia's Garry Oak Ecosystems: Principles and Practices. Garry Oak Ecosystems Recovery Team/GOERT (2006).

<sup>9</sup> Federal Species at Risk Act/SARA (2002).

B.C. Conservation Data Centre: CDC iMap (web application). Victoria, B.C., Canada (2017).

Gonzales Hill Regional Park potentially meets all of the above roles, as an important "Conservation Area", within the west and north portions of the Park, and with its world-class awe-inspiring and meditative/contemplative panoramic view within the City of Victoria. Preserving the GHRP Garry oak ecosystem and enhancing urban forests also increase property values. None of these ecosystem services have been acted upon, let alone enhanced, since the CRD acquired GHRP.

#### 5.0 The CRD Parks Land Acquisition Fund

The CRD collects most of its operational budget from municipal property taxes. Additionally, the CRD created the Regional Parks Land Acquisition Fund in 2000 for a ten-year period (2000 to 2009) to acquire land, particularly parks or potential parks within its boundaries. In 2010, the Fund was extended for another ten years to 2019. The Fund generates about \$3.7 million per year through a special property tax levy. The Fund has been significantly and rapidly accumulating the last few years and is expected to climb to \$15.7 million by 2019. At this point, there are significant funds to re-purchase the Madro lot, leaving the Garry oak ecosystem intact and protecting a contiguous green corridor within Gonzales Hill Regional Park.

The financial reporting became less transparent and accountable in the CRD Regional Parks Annual Plans after 2013. For example, there is:

- no easy way to track the average annual levy on a per household basis for the Land Acquisition Fund.
   The levy was supposed to start at \$10 for 2000 to 2009, increasing to \$12 in 2010 and incrementally by \$2 annually to a maximum of \$20 in 2014 to 2019. However, the actual levy appears to be about 2.5 times that amount. 5
- no breakdown for the regional parks function in either the CRD Annual Reports or CRD Statements of Financial Information.
- no separate reporting for the annual revenues and expenditures in either the CRD Annual Reports or CRD Statements of Financial Information.

Apparently, no park land acquisitions were planned for 2014 to 2019, resulting in an accumulating fund of \$15.626 million by 2019 s (Refer to Schedule C: *CRD Regional Parks Allocated Revenue and Expenditures: 2012-2016*).

- 6.0 What the CRD Board, the CRD CEO, CRD Regional Parks Committee, and CRD Parks and Environmental Services Department Need to Urgently Do Regarding the Madro Lot Development
  - In exercising its management and stewardship responsibilities, the CRD needs to collaborate with the City of Victoria before any proposed construction proceeds (assuming any construction does proceed, with or without variances) so that the CRD:
    - a. conducts an Environmental Impact Assessment (AEI), with input from the author and at least one other Gonzales Hill Neighbour to develop the Terms of Reference and to assist in the oversight of the project. The EIA would also assess the impact of the removal of 45% to 100% of the trees within a Garry oak stand, coupled with extensive and prolonged rock blasting on the remaining stand of Garry oaks at the lot driveway entrance at the top of Fairfield Place, in addition to the removal of a well-hidden green corridor for animal and bird movements. This analysis should also assess the likely adverse impact of 100s of truck movements over the root system area of the affected and weakened remaining Garry oak stand.

CRD Regional Parks Land Acquisition Strategy: 2015 to 2017 (July 8, 2015).

- b. conducts an ecological study to develop baseline data for biodiversity enhancement and an inventory catalogue of numbers and types of invasive, native, and rare species and a Remediation and Restoration Plan.
- c. conducts an archeological survey, particularly at the east end of the Madro lot in addition to the southwest and northern portions of the CRD property (A permanent First Nations village resided in McNeil Bay and a temporary village in Gonzales Bay within the Chilcowitch family territory.).
- d. conducts a scientifically-valid and reliable park user survey for GHRP, including the sub-set of immediate Gonzales Hill neighbours situated near or adjacent to the Park.
- e. sets up a Gonzales Hill Neighbourhood Advisory Group for future input in guiding the Park's stewardship by CRD Parks management.

The City of Victoria BOV process does not eliminate the obligations, as specified in the CRD Regional Parks Strategic Plan, for the CRD to carry out this work.

As the same time, the City of Victoria Sustainable Planning and Community Development Department needs to also carry out parallel work, including exerting "design control" (assessing the adverse impact of the proposed Madro house mass and vertical profile; the surface water drainage from the very steep driveway and front paving stone apron down to our property, other properties downstream from this lot, and the steep incline on Fairfield Place) and not granting a construction permit or tree-cutting permit until the CRD has completed the above work, especially (a) to (d), inclusive.

Ultimately, to preserve the ecological integrity of this Garry Oak ecosystem and the landform promontory and future GHRP degradation, the CRD needs to either co-purchase or expropriate the Madro lot. The expedient goal, with long-term preservation of the Gonzales Hill Regional Park Garry oak ecosystem for a greater public benefit for succeeding generations of Victorians and park users, would be to make the Madros whole (i.e., re-pay them either the greater of purchase price or market value.).

The CRD is empowered to act as an "expropriating authority" as well as the "approving authority" under the Local Government Act and the B.C. Expropriation Act (RSBC 1996) Chapter 125.

It's long past-due for the CRD to exercise the management and stewardship of Gonzales Hill Regional Park to a best practices standard. In fact, GHRP has only had one allocated project out of 160 total projects (or 0.62%!) over the first five years of the CRD Strategic Plan, accounting for \$13,593 (or 0.06%!) of the Park operational and facilities planning budget over this period. On the other hand, with a sense of urgency, importance, and immediacy, the CRD's leadership can resolve to become part of the solution to deal with the significant adverse impact of this unsuitable Madro lot development abutting Gonzales Hill Regional Park. This is a "special and unique ecologically and culturally-sensitive case" for consideration (including the incorporation of the Madro lot into the existing Park), involving a badly-degraded Garry oak ecosystem in the only CRD Park within the City of Victoria and deserves to be preserved and protected for future generations. Alternatively, perhaps, the CRD will donate Gonzales Hill Regional Park to the City of Victoria?

Respectively,

Brad Atchison MBA, CMC, M.Sc., B.Sc. (Hon.), P.Mgr.

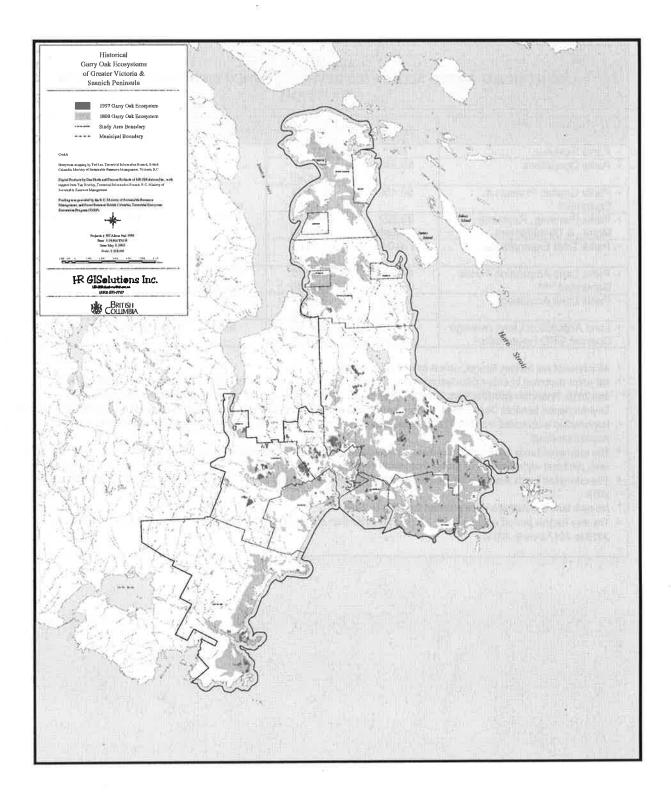
## Appendix A: NUMBER OF PROJECTS IN CRD REGIONAL Parks - 2012 to 2016<sup>a</sup> (Ref.: CRD Annual Plans)

CRD Regional Park		Total Number of				
	2012	2013	2014	2015	2016	Projects per Park
Brooks Point/Pender Island	0	3	4	1	1	9
Coles Bay	0	0	1	0	0	
Devonian	0	0	0	0	2	2
East Sooke	0	0	0	6	3	9
Elk/Beaver Lake	1	4	4	4	2	15
Francis/King	1	1	1	0	0	3
Galloping Goose <sup>b</sup>	5	14	7	6	4	36
Ganges Hill/Salt Spring Island	0	1	0	0	0	рото полици
Horth Hill	0	0	1	0	0	1
Humpback Reservoir	0	0	1	0	0	1
Island View Beach	0	2	3	2	1	8
Jordan River	3	5	1	0	0	9
Kapoor	0	0	1	0	0	8 V DERRICA
Lochside Trail	1	2	4	2	5	14
Matheson Lake	0	0	0	1	1	2
Matthews Point/Galiano Island	0	1	0	0	0	1
Mill Farm/Salt Spring Island	0	1	0	0	1	2
• Mill Hill	1	3	2	0	0	6
<ul> <li>Mount Parke/Mayne Island</li> </ul>	0	1	2	1	0	4
Mount Wells	0	0	0	1	0	1 = 1
Mount Work/Durrance Lake	0	2	0	0	2	4
Sea to Sea	1	1	1	1	4	8
Sooke Potholes	0	0	1	3	0	4
Thetis Lake	1	4	3	2	4	14
Witty's Lagoon	1	0	1	1	0	3
Gonzales Hill	0	1	0	0	0	1
Total Number of CRD Projects Over Five-Year Period =						160

This data is compiled from the CRD Regional Parks Annual Plans. The number of CRD parks projects reported is independent of the amount spent per project per park. Obviously, a handful of regional parks have received a substantial amount of capital expenditures over the period 2012 to 2016, particularly the Galloping Goose/E&N Rail Trail-Humpback Connector, Elk-Beaver Lake, Lochside Trail, and Thetis Lake Regional Parks. Gonzales Hill Regional Park, by contrast, had only one small project in 2013 for a cost of \$13,593 over this five-year period.

<sup>&</sup>lt;sup>b</sup> E&N Rail Trail-Humpback Connector is included with the Galloping Goose projects.

Appendix B:
Distribution of Garry Oaks: 1800 to 1997



# Appendix C: CRD REGIONAL PARKS ALLOCATED REVENUE AND EXPENDITURES - 2012 to 2016 (\$ millions)<sup>a</sup>

CRD Regional Parks	Year							
	2012	2013	2014	2015	2016			
Parks Revenue	NR <sup>b</sup>	\$11.154						
Parks Operations	\$6.543	\$3.687 (actual)			11			
Parks Capital: Projects & Equipment	\$0.489	\$0.953 (actual)		NR	NR			
Parks Planning, Resource     Mgmt., & Development	\$0.522 (actual)	\$0.926 (actual)	NR					
Parks Total Expenditures	\$10.014	11.154 (actual)						
Parks Land Acquisition Funds	\$7.659	\$3.635	\$3.805	\$3.765	\$4.544			
Generated c,d,e	(actual)	(actual)	(actual)	(actual)	(actual)			
Parks Land Acquisition	\$2.912	\$3.869	nil <sup>f</sup>	nil <sup>f</sup>	nil <sup>f</sup>			
	(actual)	(actual)						
Land Acquisition Levy: Average	\$51.19	\$54.00	\$20?	\$20?	\$20?			
Cost per CRD Household <sup>9</sup>	(actual)	(actual)						

- <sup>a</sup> All amounts are budget figures, unless otherwise indicated.
- b NR = Not recorded in either *CRD Statements of Financial Information* or *CRD Parks Annual Plans* for 2012, 2014, 2015, and 2016. Financial reporting from 2013 onwards became less transparent for the operations of the CRD Parks and Environmental Services Department. Parks revenue and expenditures, including sub-expenditures, are absent for 2014 to 2016.
- Information is compiled from CRD Land Acquisition Reports: Summary of 2012, 2013, 2014, 2015, and 2016 Parks Land Acquisition Fund.
- <sup>d</sup> The estimated funds available for land acquisition do not include potential revenue from the disposition of any regional park land, personal endowments, or grants from other sources.
- The estimated funds available for land acquisition are projected to jump to \$11.925 million in 2018 and \$15.626 million in 2019.
- f No park land acquisitions were planned for 2014 to 2019.
- The levy for this period appears to be 2.5 times greater than stated in the CRD Regional Parks Land Acquisition Strategy: 2015 to 2017 (July 8, 2015).