Memorandum

To: Oak Bay Parks and Recreation Commission

From: Urban Forest Strategy Working Group

Subject: Developing an Urban Forest Strategy for Oak Bay

Date: May 29, 2013

In January 2013, Oak Bay Council requested the Commission to "consider and report to Council by June 15, 2013 with recommendations for adoption of an Urban Forest Strategy for the District of Oak Bay, which would be a long-term plan to achieve a sustainable urban forest in Oak Bay".

The Commission formed a Working Group of three Commission members, the Parks Manager, a member of the Environmental Advisory Committee, and an expert botanist. This group met several times over two months and prepared the attached report.

The report takes "urban forest" to refer to all the trees and treed environments on public and private lands within the District of Oak Bay, along with their soils and associated vegetation, both natural and cultivated. These include all treed landscapes in the community, including old-growth remnants, backyard fruit trees, treed boulevards, parks and trails, Garry oak meadows and other natural ecosystems. The report describes the many environmental, economic, recreational and public health benefits of a healthy urban forest.

The report relates recent history of Oak Bay local government and community reports and initiatives valuing the urban forest and, particularly, Garry oak and associated ecosystems. From the 1997 Official Community Plan to the more recent Climate Change Task Force, *Tree Protection Bylaw* amendments, and the 2013 Heritage Plan, Oak Bay residents and Council have repeatedly articulated how much they value the urban forest and its contributions to the quality of life in Oak Bay.

Garry oak ecosystems have been the essential foundation of the local forest since before European settlement and remain its defining characteristic today. Oak Bay is still home to significant remnants of these ancient ecological features, including several sites of sensitive ecosystems supporting numerous species at risk – but these are under threat, among the most endangered in Canada.

Historical records and recent aerial photo mapping detail how the urban forest in Oak Bay has declined and continues to be threatened. Expanding land coverage by impervious surfaces (streets, parking lots, etc.) adds significant, increasing pressures upon the health of the urban forest and local watershed.

Parks department records for recent years show a continuing pattern of significant net loss of trees with insufficient replacement, despite the *Tree Protection Bylaw*. Development pressures and natural losses continue to deplete the Oak Bay urban forest at an alarming rate. Remaining examples of sensitive ecosystems and species at risk lack effective, systematic protection.

Together these factors provide clear indication of both strong community support and a critical need to develop and implement a comprehensive long-term strategy to conserve, protect and enhance our urban forest.

The report summarizes some elements commonly included in an urban forest strategic plan and lays out a suggested work plan to develop this long range plan for Oak Bay over the coming year. It discusses how Oak Bay may benefit from and build upon the recent experience of neighbouring communities in developing their own long-term plans for the urban forest.

In conclusion, the report recommends that work on the urban forest strategy should continue to the next stage as soon as practicable, in order to be completed within a year. This work is expected to be complementary to the current OCP renewal process and to be informed by its expression of community values and goals. The Working Group recommends continued support and guidance of this work by a community advisory committee.

The Working Group has considered to what extent the required work could be accomplished by using staff resources augmented by volunteers and has come to the conclusion that it is essential to engage an expert consultant, reasoning that recognized, independent expertise will add strength and legitimacy to both the process and the product. A consultant would be guided and assisted by staff and community volunteers, as has been the case for the Heritage Plan and the Official Community Plan renewal.

Therefore, the Group recommends a budget of approximately \$20,000 be allocated to fund consultant services over the 2013 and 2014 fiscal years to complete the urban forest strategy for Oak Bay.

Respectfully submitted;

Urban Forest Strategy Working Group

Ron Carter
Alison Davis
Matt Fairbarns
Chris Hyde-Lay
Rick Marshall
Chris Smith



Developing an Urban Forest Strategy for Oak Bay

Report to Parks and Recreation Commission

May 29, 2013



Developing an Urban Forest Strategy for Oak Bay

Report to Parks and Recreation Commission

May 29, 2013

1. The Task - Council's Referral to Commission

In January 2013, Oak Bay Council passed a resolution requesting the Parks and Recreation Commission to "consider and report to Council by June 15, 2013 with recommendations for adoption of an Urban Forest Strategy for the District of Oak Bay, which would be a long-term plan to achieve a sustainable urban forest in Oak Bay to:

- conserve the existing treed environment;
- enhance the urban forest for the future; and
- increase community understanding of and support for the urban forest."

Council further requested the Commission to:

- consult with interested individuals and groups, including Oak Bay volunteer advisory bodies, and individuals in Oak Bay and the Capital Region;
- consider related studies, strategies, and initiatives in the Capital Region and elsewhere, including the Urban Forestry Stewardship Initiative and subsequent work; and
- recommend applicable tools and actions to support the Urban Forest Strategy and its implementation in Oak Bay, including, but not limited to:
 - o possible amendments to the *Tree Protection Bylaw* and its administration, as well as possible amendments to pertinent provisions in other bylaws;
 - o proposed Parks Department plans and activities to manage the urban forest on public property;
 - other proposed measures to protect and enhance the urban forest on private properties in the District;
 - o potential sources of external funding to support an Urban Forest Strategy and management plan; and
 - ways to effectively engage community volunteers in activities to support the Strategy.

At subsequent meetings in February and March, the Commission initially considered a staff report proposing a 12 month process including consultation with the public and interested stakeholder groups. That approach entailed engaging a professional consultant at an estimated cost of \$40,000 to \$60,000, beginning with a detailed inventory of all trees on municipal property at a cost of \$15,000 to \$20,000.

Considering this cost prohibitive, Commission then decided to form a working group of Commission members and community volunteers with pertinent expertise and interest to propose a workable plan to proceed in developing the urban forest strategy, as requested by Council.

2. Introduction

The term "urban forest" refers to all the trees and treed environments on public and private lands within the District of Oak Bay, along with their soils and associated vegetation, both natural and cultivated. These include all treed landscapes in an urban community, including old-growth remnants, backyard fruit trees, treed boulevards, parks and trails, Garry oak meadows and other natural ecosystems. The urban forest in Oak Bay is distinguished by significant remnants of the ancient Garry oak and associated ecosystems which dominated the area before the arrival of European settlers in the 1800's. Indeed, the municipality's very name and heraldic motto, "Sub quercu felicitas", are derived from its characteristic association with this distinctive ecology.

Healthy urban forests provide many environmental, economic, recreational and public health benefits, they:

- improve the atmosphere by producing oxygen and removing carbon dioxide and other pollutants, reducing climate change;
- mitigate storm water run-off and flooding and improve natural ground water retention;
- moderate urban heat island effects;
- promote outdoor activity, providing recreational and health benefits;
- provide habitat to support wildlife and ecological diversity;
- enhance community esthetics and increase property values;
- calm vehicle traffic, encouraging pedestrians and cyclists in shopping and residential areas; and
- constitute the only element of municipal "green infrastructure" that actually appreciates in value over time.

An *urban forest strategy* is a long-range, strategic plan to achieve a sustainable urban forest in the District by: conserving the existing treed environment; enhancing the urban forest for the future; and increasing community understanding and support for the urban forest. It recognizes the benefits and the challenges of sustainable forestry in an urban environment, where most land is privately owned and managed.

Neighbouring municipalities have recently developed and adopted such plans – Saanich, an *Urban Forest Strategy* in 2010, and Victoria, an *Urban Forest Master Plan* in 2013. Both recommend a comprehensive range of goals, strategies and actions to optimize benefits of the urban forest in their respective jurisdictions. Both are based on recent research and local data sources relevant to Oak Bay and both deal with environmental, climatic and legislative conditions that are also applicable to Oak Bay. Both were developed through extensive processes of consultation with municipal staff, residents and other stakeholders – processes from which Oak Bay may learn. Both provide reasoned, expert-informed support for systematic and holistic approaches to attain future sustainable urban forests in their respective communities.

3. Previous Reports and Initiatives Have Valued the Urban Forest in Oak Bay

Several prior community or municipal initiatives and reports over the past 15 years indicate how the Oak Bay community has continued to value and tried to protect the urban forest and Garry oak associated ecosystems.

The 1997 Official Community Plan, currently being renewed through extensive public consultation, was founded on a vision of a "healthy living environment that respects and complements the attractive natural setting of the Municipality". Among its several goals were:

- "to maintain and enhance the green and landscaped character of Oak Bay";
- "to encourage the preservation of the natural and architectural heritage areas within the community"; and
- "to preserve and enhance the quality of the natural environment of Oak Bay".

The *Parks and Recreation* section of the *Plan* included goals: "to protect and maintain natural areas in their natural state" and "to protect, maintain, and rejuvenate Oak Bay's urban treescape". It also supported specific objectives "to maintain the existing natural park areas in their natural condition", referring to these natural park areas (e.g., Trafalgar, Walbran and Anderson Hill) as "truly magnificent" and reflecting "the natural heritage of the community". Another specific objective was to initiate "an overall management and improvement strategy for Uplands Park".

The *Plan* cited the District's namesake Garry oak as "one of the most important symbols of this community", calling for special protective measures for these trees, particularly on private property, in the face of natural and development pressures.

In 1995, a *Garry Oak Tree Protection Bylaw* (#3835) was adopted by Oak Bay Council to afford limited protection for that species on private property. In 2006, on advice from the Parks and Recreation Commission, Council expanded this to a more general *Tree Protection Bylaw*, extending protection on private property to trees of other native species and to larger trees of any species. This Bylaw was again reviewed and revised in 2011 to extend further the definition of "protected trees" and to increase required performance deposits and penalties for infractions. At that time, the Commission sub-committee reviewing the bylaw, noting the serious rate of decline in the mature Garry oak population, considered developing an urban forest strategy for Oak Bay, but opted to defer the matter pending the conclusion of such initiatives in Saanich and Victoria (see above).

Uplands Park/Cattle Point, at 31 hectares, is the largest remnant of pre-1800's Garry oak and associated ecosystems in Oak Bay and considered the best example of such ecosystems in Greater Victoria. It is an important traditional cultural site for the Lekwungen First Nation. Its biodiversity is extremely valuable ecologically; it is home to 31 provincially-rare plants, including 22 species at risk. One of the most serious threats to these species at risk is invasion by exotic plants; approximately 40% of the plant species in the Park are non-native, some of them very invasive. In 2004-05, in conjunction with the University of Victoria, Restoration of Natural Systems Program, Oak Bay funded preparatory work in Uplands Park including a rare plant inventory and management plan, a stewardship plan, an invasive species management plan, and

mapping of invasive species within the park. Since 2005, the Canada Habitat Stewardship Program (HSP) has provided annual funding for Oak Bay Parks to hire a crew and professional botanists to assist municipal arborists in removing invasive species. This annual staff work has been augmented immeasurably by thousands of hours of volunteer work led by Friends of Uplands Park.

The **Oak Bay Climate Change Task Force**, in its 2008 Final Report on means to promote reduction of greenhouse gas emissions in the District, called for a tree planting program and for expanding the urban forest cover in Oak Bay, since trees remove carbon dioxide from the atmosphere, as well as providing other important ecological functions.

In May 2009, the **Oak Bay Green Committee** hosted a public forum on the urban forest and watersheds in Oak Bay. Participants called for, among other things, a stronger *Tree Protection Bylaw*, promotion of planting Garry oaks, and development of a strategic management plan to preserve the urban forest and watersheds, including a strong public education component. A Green Committee member, David Godfrey, has since developed a website photo-documenting Oak Bay's Garry oak trees by location.

Oak Bay has been an active participant in the CRD **Regional Sustainability Strategy**, including its commitment to ecological health, environmental protection, biodiversity, protection of environmentally sensitive areas, healthy urban forests and watersheds. Oak Bay has supported the Bowker Creek Initiative, and Council has endorsed the *Bowker Creek Blueprint: a 100 year action plan*. Oak Bay Parks staff are partners in the Capital Region Invasive Species Partnership (CRISP) to manage emerging invasive plant species.

The 2013 **Oak Bay Heritage Plan** noted Oak Bay residents' expressed strong connection with the "overall 'green' quality" of the community, including streetscapes characterized by mature street trees, lanes with natural features, private gardens and trees. Residents often expressed appreciation for Oak Bay's natural heritage, including creeks, rocky outcrops and hills, Garry oak and arbutus ecosystems, Uplands Park, mature trees and spectacular views. This was summed up in a call to "Keep the oak in Oak Bay". The Plan's goals include:

- to conserve established streetscapes and neighbourhoods; and
- to conserve natural landscape features and ecological heritage.

Specific actions identified for the latter goal include:

"Identify, inventory and map unique micro ecosystems, groves of trees and other significant natural features.

Implement appropriate protection measures to ensure protection of natural landscape features".

In summary, these several reports and initiatives document the strong and long-standing desire that Oak Bay residents and their local government have expressed and acted upon to value and protect the urban forest and, especially, Garry oak and associated ecosystems. Despite these intentions and actions, the urban forest and, particularly, Garry oak populations have continued to decline in the face of continuing threats.

4. Past Trends and Current State of the Urban Forest in Oak Bay

Information is available from different sources using varied techniques to describe the current state and changes over time in the extent and nature of the Oak Bay urban forest, in which Garry oaks were once dominant and still remain emblematic.

Garry oak and associated ecosystems are among the most endangered in Canada. Once common in coastal areas of southwest British Columbia, less than 5% of these ecosystems remain in near-natural condition. Most of these remnants are in isolated and fragmented communities that have no connection to other Garry oak communities, further threatening their sustainability. The loss or degradation of habitat has resulted in over 100 indigenous species being "at risk" in these ecosystems. There are two major types of Garry oak ecosystems present in remnants in Oak Bay: deep soil or parkland (e.g., Uplands Park); and shallow soil (e.g., Cattle Point, Anderson Hill). (Source: GOERT)

Oak Bay is part of Vancouver Island's eastern coastal lowland and adjacent Gulf Islands comprising an ecological region unique in Canada. The Mediterranean-type climate and long growing season support many rare species of plants and animals and a variety of productive ecosystems. It is also one of two areas in British Columbia where the greatest loss of natural systems has occurred and continues to occur. Intense development pressures throughout this region have resulted in the fragmentation and loss of most of these natural areas. The **Sensitive Ecosystems Inventory** (SEI) project (1997) identified the remnants of these rare and fragile terrestrial ecosystems in order to encourage land-use decisions which will ensure their continued ecological integrity. Several of these significant ecosystems remnants are in Oak Bay, especially at Uplands Park/Cattle Point. They remain without comprehensive plans for protection.

In 2006, Garry Oak ecosystems in Greater Victoria were mapped by Ted Lea to show historic (ca. 1800) and modern (1997) distributions. He found overall loss in that period of ~90% - higher in deep soil sites. In Oak Bay, Garry oak ecosystem coverage had diminished dramatically over that long period, from some 1460 hectares originally to scattered remnants totalling about 21 hectares (about the area of 21 rugby fields) – less than 1.5% of the original coverage area for both deep soil and shallow soil types. Uplands Park includes the largest remnant, much of it compromised by severe invasion by non-native species. Some of the characteristic large, old oaks still found in parts of Oak Bay, on streets and in parks and private yards, would have been in place as part of the historical reach of Garry oak ecosystems. Because of urban development patterns they are now isolated and vulnerable to urban horticultural practices, their natural understory plants gone and their natural regenerative processes curtailed.

In 2008, the **Urban Forest Stewardship Initiative** of Habitat Acquisition Trust (HAT) undertook a project to map changes over time in *tree canopy cover* and *impervious surface cover* in Greater Victoria, in order to provide a reliable baseline dataset that could be used to track future changes and guide urban forest stewardship planning. In cooperation with the CRD, the original HAT work was recently updated to 2011 using more sophisticated and detailed digital ortho-photographic techniques. This work should enable detailed maps for Oak Bay. The directional trends in land-cover changes continued as earlier observed, although comparisons with 1986 data are imprecise due to the lower quality aerial photography techniques used then.

Tree canopy cover is a direct measure of the extent and intensity of the urban forest. The extent of impervious surface (streets, driveways, parking lots, roofs, etc.) in an urban area is an environmental concern because of its adverse impacts on natural air and water resources and natural ecosystems. For the urban forest, impervious surfaces block rainwater infiltration and natural groundwater recharge. They interrupt natural watershed run-off patterns, contribute to flooding and increase demands on expensive, artificial storm-water drainage infrastructure.

Treed land cover in Oak Bay diminished between 2005 and 2011 by 24.5 hectares or 6.3%, reducing its coverage of total Oak Bay land area to 35%. In terms of tree cover density, the area of Oak Bay with more dense tree cover (>50%) shrank by 18% or 43 hectares, while the area of sparse tree coverage (<5%) grew by 31% or 5 hectares.

Impervious land cover in Oak Bay increased between 2005 and 2011 by 38.7 hectares or 13.3%, increasing its coverage of total Oak Bay land area to 32% - *very nearly the same coverage as by treed land*. In terms of impervious surface density, the area of Oak Bay with more dense (>50%) impervious surface cover increased dramatically over the six years by 35 hectares or 54%, while the area covered least densely by impervious surfaces (<5%) shrank by 9% or 11 hectares in the same period.

Oak Bay *Tree Protection Bylaw* administration records from the Parks Department confirm on the ground the decline in the Oak Bay urban forest observed by aerial photography. For the five years from 2008 through 2012, these records show losses from private properties in the District of a total of 262 Garry oaks, plus 314 other trees protected due to their native species and/or size greater than 60 cm. diameter. This loss of nearly 600 protected trees in five years represents a significant loss of tree canopy – perhaps 100 m. sq. for each mature tree.

For 2011, detailed records show permitted removals of protected trees from private property of 131, with required replacements of only 37 or 28%. That year, there were 72 removals from public property, with 53 replacements planted (74%). For 2012, there were 133 permitted removals of protected trees from private property, plus 20 allowed for development, with replacement planting of 40 or 30%. On public property, there were 71 removals, with replacements of 101 new trees or 142%.

There is clear and continuing pattern of significant losses, due to natural and development pressures, of large, mature Garry oaks aged 100 to 200 years, only to be replaced, if at all, by saplings. Projections of this pattern indicate a serious resultant future reduction in tree canopy cover before succession plantings mature to significant size. A newly planted sapling takes 100 years to replace a century old tree.

In summary, available data from various sources confirm the sustainability of the urban forest in Oak Bay has been and continues to be threatened by the aging and demise (without adequate replacement) of the original oaks, by urban horticulture practices that disfavour large trees and expansive treed areas, and by expansion and densification of impervious surface cover. Unique, precious remnants of rare, sensitive ecosystems in the District are especially threatened by invasive plants and recreational use. These multiple threats call for a comprehensive, strategic plan to preserve, protect and enhance the urban forest, with its many values to the community.

5. Scope and Contents of Urban Forest Strategic Plans

A review of many strategic planning documents for urban forests from Canadian and American jurisdictions reveals common patterns in their scope and content, adapted to reflect specific local conditions. Descriptions and a few illustrative examples of common elements are presented below.

Definition of Urban Forest: For example, from the Victoria Urban Forest Master Plan: "An urban forest includes all of a community's trees, shrubs and groundcover and the soils in which they grow. Parks, natural areas, boulevards, and residential gardens are examples of some of the many and diverse treed areas that make up the urban forest on public and private lands."

Vision statement: This is generally an aspirational description of a desired future state for the urban forest in the community, possibly at a specified future time. For example:

"The urban forest in Saanich is a highly valued asset comprised of a rich and diverse forest that is widely recognized and appreciated for the contribution that it makes to our community and to our sustainable environment." (Saanich)

"In 2060, Victoria's homes and businesses lie within a stunning urban forest that is healthy, diverse, and abundant in all parts of the city. Treed environments are valued as an integral part of this vibrant, livable and sustainable community: supporting biodiversity and watershed health; enhancing neighbourhoods; and creating places for activity, enjoyment and relaxation. Victoria's urban forest exemplifies sound and innovative practice and community stewardship." (Victoria)

Goals: These include more or less general statements of desired direction in attaining change; they may also reflect expressions in other major community planning instruments, such as official community plans, heritage strategies or climate change strategies. Examples:

- "Develop and maintain strong community-wide support for the urban forest." (Victoria)
- "Protect and Enhance the Urban Forest" (Saanich)
- "Maintain biodiversity in the urban forest."
- "Protect and maintain natural ecosystems."

Strategies and tools: These represent various means to achieve stated goals, such as:

- "Maintain public trees in healthy condition through arboriculture best practices."
- "Promote planting and appropriate care of native trees."
- "Strengthen tree protection bylaws."
- "Encourage alternatives to impervious surfaces in land development."
- "Educate public on threats and control of invasive plant species."
- "Seek external and alternative funding sources to support urban forest initiatives."
- "Expand identification of *significant* trees for protection."

Outcomes and targets: These describe measures of success and target outcomes for achievement of chosen goals, such as:

- "Maintain urban tree canopy cover at minimum of 35% of land cover."
- "Replace all protected trees at twice the rate of loss."
- "Maintain impervious surface at maximum of 30% of land cover."
- "Increase rate of native tree planting in public areas by 50%."

Actions for implementation: These are specific actions to be taken on identified strategies directed to achieve specified outcomes or targets, such as:

- "Inventory protected trees on all properties subject to building permit requests."
- "Create staff position to promote urban forest and control invasive species."
- "Develop and implement urban forest design guidelines for urban development."
- "Implement a five-year plan for planting of native trees on public property."
- "Develop guidelines to reduce impervious surfaces and improve rain water retention/infiltration in private property developments."

These are just examples of the types of elements – not the specific goals, strategies, targets or actions – that may be expected to be included in an urban forest strategy for Oak Bay, as they have been in such plans for other communities.

6. A Plan to Create an Urban Forest Strategy for Oak Bay

Scope: The scope of the strategy should be consistent with the working definition of "urban forest" and Council's earlier referral to the Commission to prepare a long-term plan to achieve a sustainable urban forest in Oak Bay. It should include all treed environments and all lands, public and private, in Oak Bay, with particular attention to Garry oak and associated ecosystems and the protection of species at risk therein.

Time Frame: The next stage of work should commence as soon as practicable, in order to be completed early in 2014.

Essential elements of the project:

- Define resources to be used staff, volunteers, contracted expert consultants;
- Review data sources on Oak Bay urban forest and natural areas;
- Review similar plans from other jurisdictions for analysis and recommendations;
- Consult Oak Bay residents, municipal officers and staff, Lekwungen First Nation, community groups, friends of natural areas, arborists, developers, etc.;
- Review Oak Bay current urban forest management mandate, responsibilities, tools, resources, activities and impacts; and
- Consider the vision, goals, strategies, outcome targets, implementation actions, and means of monitoring and accountability needed to ensure a sustainable urban forest in Oak Bay.

7. Recommendations

It is understood that Council wishes the work of developing an urban forest strategy to proceed, as requested, as soon as possible. Given the current process of public consultation on renewal of the Official Community Plan, it is recommended that work on the next stage of developing the urban forest strategy begin as soon as practicable, with consultation processes to commence in the fall of 2013 and a final report by June 2014. This work is seen as complementary to the OCP renewal process and would be informed by its articulation of community values and goals.

The Working Group recommends that this project should continue to be guided by an advisory committee, similar in makeup to the current working group, with representation from the Commission, Parks staff and Environmental Advisory Committee, plus other community members with pertinent interest or expertise. This group would support and guide the project through refining terms of reference, selection of an expert consultant, consultation with residents and interested parties, information gathering and analysis, and preparation of the final report.

The Working Group has considered to what extent the required work could be accomplished by using staff resources augmented by volunteers and has come to the conclusion that it is essential to engage an expert consultant, reasoning that recognized, independent expertise will add strength and legitimacy to both the process and the product.

The Group considers further that the amount of work needed to be done by a consultant and the resultant cost should be reduced, relative to the recent experience of Saanich and Victoria, because of a number of factors. These include: the smaller size of the community and its forest; the current availability of baseline land cover analysis from HAT/CRD; the existence of other valuable data sources, as noted; a smaller and less complex network of interested parties to be consulted; availability of recent information on related community values from both the Heritage and OCP consultation processes; a smaller municipal arboriculture program; and , not least, the availability of recent, quality urban forest plans in Saanich and Victoria for reference.

Therefore, the Group recommends a budget of approximately \$20,000 be allocated to consultant services over the 2013 and 2014 fiscal years to complete the urban forest strategy, as requested by Council and outlined above.

References:

Capital Regional District (in partnership with Habitat Acquisition Trust)

CRD Land Cover Mapping: 1986, 2005, and 2011 - summary report, 2013

Gary Oak Ecosystems Recovery Team GOERT

Restoring British Columbia's Garry Oak Ecosystems: Principles and Practices 2011

Best Management Practices for Garry Oak and Associated Ecosystems 2012

Ted Lea, Historical Garry Oak Ecosystems of Vancouver Island, British Columbia, pre-European Contact to the Present, 2006,

http://www.davidsonia.org/files/17 2 lea.pdf

Saanich, BC <u>Urban Forest Strategy</u> 2010

Victoria, BC <u>Urban Forest Master Plan</u> 2013

Programs

Aquatics

- May special events in the pool included:
 - Youth Night free admission for swimmers 10-18 years old on the last night of Youth Week.
 - Moms swam for free during the Mother's Day Family Swim on Sunday May 12th
 - A free swim sponsored by Coast Capital on Monday May 13th
 - Anchors Away! on Friday May 17th featured nautical themed games including boat rides & create your own lifejackets
 - On Monday May 20th the lifeguard team held a pool deck tea party, made shaving cream hats and visited with The White Rabbit at the Mad Hatter Swim
- Thursday May 16th was National Lifejacket Day. Staff from Oak Bay, Monterey and Henderson Recreation Centres pledged to stay safe on the water this summer by wearing their lifejackets to work for the day. Buckles the Red Cross mascot visited during swim lessons, children decorated posters to tell other swimmers why they wear their lifejackets and the reception team handed out National Lifejacket Day stickers. The team also connected with the Canadian Red Cross via facebook to help spread the word.

Fitness

- The May Pass has been on sale since March 15th for \$25. There have been 973 passes sold at Recreation Oak Bay that allow participants to use 16 recreation facilities in Greater Victoria. The pass is a great incentive to start or maintain fitness and fun for 2013.
- A new 'Fitness for Travel' workshop was offered on May 11th with great success. The workshop demonstrated a variety of exercises using the resistant band to tone and strengthen the entire body for a full body workout. The workshop was instructed by fitness staff, Janet Knight and was well received by the participants.
- Recreation Oak Bay was invited to attend a Foot Care workshop held by the Canadian Diabetes Association on Saturday, May 11th, 2013 at the University of Victoria. Fitness Staff, Graham Lamb, attended the event and provided workshop delegates with handouts and information on Oak Bay's fitness programs and resources.

Community Recreation

- During the month of May, Paddington Station Daycare learned about baby animals, went on a field trip to Beacon Hill Petting Zoo and transformed the housekeeping area into a veterinary clinic. The children are also learning about nutrition and their bodies. They have been exploring their favourite healthy foods and each child brought in their favourite healthy snack to share with all their friends.
- Registration for Fall Afterschool Program is busy with only a few part time spots available on Mondays and Fridays.
- Lessons are ending for Afterschool Program as staff and children are now taking advantage of the nice weather and head out doors for activities and trips.
- Afterschool Program Spring Carnival is Thursday, May 30th at Oak Bay Recreation Centre. Children from all of the centers take part in games, activities, dance competitions, all based around a water theme.
- Planning is underway to implement a Nature Preschool at Henderson Centre on Tuesday and Thursday mornings starting in September 2013. Major tasks include getting the licensing process and marketing materials finished.
 Registration is set to start Monday, June 17th.
- The Community Recreation Coordinator, Community Recreation Programmer and the Sports Programmer attended the BCRPA conference in Whistler. It was 3 days of learning and networking and staff were able to report back to the

- program team meeting on the sessions that were of interest such as "Engaging Volunteers and Temporary Staff", "Bridging the Gaps Strategies for Challenging Behaviours" and "Bringing Back Play".
- The Victoria Disabled Golfers Association (VDGA) held their annual family golf event at Henderson Park Golf Course at the end of April. Over 30 participants and their caregivers enjoyed the golf nets, golf games on the grass area and a couple of holes of golf.

Monterey Centre

- 100 people attended the Eco Fashion Show Friday May 3rd. Attendees enjoyed a glass of wine on arrival, a buffet dinner, a Salsa Dance demonstration by Sabor Asi Dance Company and the Eco Fashion Show featured local models wearing clothes from A La Mode Consignment. Each participant took home a large swag bag containing items and discount coupons from local merchants. Special thanks to the CIC for donating funds and MC Michelle Kirby for carrying out her role with enthusiasm and humor.
- The Monterey Widow and Widowers Club hosted a Fashion Show on Saturday May 11th featuring fashions from Country Life. 87 people attended and enjoyed the delicious afternoon tea and the spring fashion show.
- 92 people attended the Dinner Theatre event hosted by the Monterey Senior Players on Tuesday May 14th. The one act play Home Sweet Home was written by Monterey Member Greg Finnegan.
- 29 Monterey Members enjoyed breakfast at the Legislative dining room and a tour of the Parliament Buildings on Monday, May 27th.
- The CNIB had a display in the lobby on Friday May 17th and shared information on vision health with Patrons.

Arena / Teens / Indoor Sports Field

- Summer rates for the indoor sports field started May 1st as new and existing user groups take advantage of the lower cost.
- The Regional Emergency Social/Support Services Exercise was held on May 11th on the indoor sports field.
- Spring/Summer drop-in programs are winding down with drop-in Duffer Hockey ending Tuesdays and Thursdays but continuing on Monday, Wednesday and Friday until the end of June.
- Public skate and drop-in numbers started off the year slow but we are now on par with 2012 numbers.
- Old timers 35 plus league has 2 additional teams added this year and registration is very strong with only 20 spots left and not scheduled to start until the end of June.
- Annual YES awards happened May 8th and were a great success. We had 10 award recipients and 72 people in attendance. Oak Bay News covered the event and did an excellent piece on the key note speaker for the event, Graham Landells.
- The first Summer Internship for Youth launched in May. We received 14 applicants and have room for 4 interns. The program is designed to give youth aged 14-17 training in resume preparation, cover letter writing, interviewing skills, summer camp training, and four weeks of summer camp on the job training. At the end of the program interns receive a \$500 honorarium. The Oak Bay Rotary is a sponsor of this program.
- Arena Junior Leaders program is running and full for the first time in 3 years. This program gives youth aged 12-16
 arena related training as a first step in gaining skills needed to work in the arena at Oak Bay.
- Softball teams are looking forward to the year end tournament on June 21-23 and are enjoying the progressively longer days and better weather.

Tennis

- Tennis Canada Certification Course was held in May with three of Recreation Oak Bay's tennis summer camp staff in attendance.
- Recreation Oak Bay partnered with SITA to host a Community Tennis Day at Henderson Park on May 25th. The event
 provides free tennis lessons and racquets to introduce people to the game of tennis. The turnout was better than
 expected (approximately 60-70 people) with articles in the Oak Bay News, Times Colonist and a segment on the 5pm
 CHEK News Sports.

Marketing

- The Youth Pass will be on sale for the month of June for \$125.
- Recreation Oak Bay Facebook page is hosting a photo contest under the slogan, "Recreation Oak Bay where everyone comes to play". Participants can post photos of themselves or their families playing in Oak Bay and vote for their favorite one. The winner will receive one week of free summer camp.

Eco week

• In addition to the fashion show and workshops at Monterey, Recreation Oak Bay partnered with the Community Initiatives Committee to host Trunk Treasures in the village which was an old fashion swap and shop type event. It was very successful and well received by the sellers and the public. Recreation Oak Bay also hosted an Eco Kids event on the lawn of the municipal hall. Smaller than expected numbers attended this portion of the event. The Oak Bay Police had greater success with 30-40 children through the Bike Rodeo on this day. The mayor also officially opened the rain garden at Monterey which fit in well with the Eco week theme. Evaluation by all involved recommends carrying on with this event again next year.

Upcoming Events

- The pool will be closed for maintenance from Monday, June 3rd to Friday June 21st. A day of special events is planned for re-opening day, Saturday June 22nd.
- Courts 1, 2, and 3 at Henderson will be closed for resurfacing beginning June 10. It is expected to take 2-3 weeks depending on weather.
- Rookie Tennis Player Round Robin Carnarvon Park Saturday, June 22, 9:00am to 4:00pm for Girls and Boys age groups of U9 to U14. This is a great first time competitor experience.
- Celebrate Canada Day event on the lawn of the municipal hall will be held on June 28th, 12 noon to 2 pm.

Physical Plant

Maintenance

- Maintenance department is preparing for the pool shutdown which will include: new storage cupboards in the pool storage room; painting the changerooms and benches, as well as the waterslide stairs and stations; replacing the sink counters in the female pool changeroom; repacking the main pool circ pump and lots of grouting.
- Turnstiles will be installed at reception during the shutdown.

Parks Parks

- The Oak Bay Rotary Club has expressed interest in fundraising towards a new washroom facility at Lafayette Park. The cost of the new male/female handicap washroom is estimated at \$29,500. The building would be heated, have automated door locks and would be open year round. The Rotary logo would be prominently displayed on the exterior of the building. The best side of the park is still to be determined.
- The Oak Bay Rotary Club has expressed interest in supplying a new swing set for Lafayette Park. The cost of the swing and installation materials is \$10,315. The swing would have 2 seats for children 12 and under and 2 seats for toddlers. A resident has canvassed the neighborhood and support for this project is high.
- On May 11, parks staff worked with the Oak Bay Rotary Club to give the Peter Pan Water Park its annual make over. The blue cement was repainted along with the picnic tables and some of the building walls. The Water Park is open on weekends from 11am until 4pm until June 30th and hours are extended from 10am until 6pm daily as of July 1st until September 30th.
- Parks received \$1366.00 from the Parks and Recreation Foundation of Victoria to go towards the Rhododendron
 Initiative at Henderson Park. Presently, the Victoria Rhododendron Society is designing the rhododendron beds for
 the front of Henderson Centre.
- The 'Welcome to Oak Bay' Sign has been refinished at the Entrance Park garden located at Oak Bay and Foul Bay.
- A new 'Welcome to Henderson Recreation Centre' sign will be installed close to the new addition. The sign will look very similar to the one currently at Windsor Park.
- The hanging baskets have arrived and have been installed along Oak Bay Avenue, various Recreation Centers and Estevan village.

Tree Report

Public Property

- For the month of May, Parks staff removed ten trees from public property. There were no species protected trees removed from Public land this month. These trees were removed because they were dead, diseased, dying or structurally unsound.
- There were no trees planted on public property this month.

Private Property

- For the month of May, 19 permits were issued, eight included removal of trees protected under the Tree Protection Bylaw and one permit was for a tree under bylaw protected size. These permits were issued because the trees were dead, diseased, dying or structurally unsound. Two were Garry Oaks, and one was an Arbutus. Five were protected by size. Two replacements trees are required for one removal for a new driveway.
- There was one protected tree removed for development and that was a Lawson Cypress for a new driveway for a new house.

Permits Denied

• In the month of May, one permit was denied. It is a Cedrus deodara that did not meet the requirements of section 6.

Security Deposit and Enforcement

- For the month of May one security deposit was received and one was refunded. The bylaw requires security deposits to ensure care of required replacement trees; deposits are held by the Municipality for 3 years pending satisfactory planting and care or required replacement trees. Forfeited deposits go to the Parks tree purchase account.
- For the month of May, Bylaw enforcement staff issued no tickets

•	Tree Work Orders for Park Staff

f May, the Arboricultu ng with working on th		rotection and pub	olic tre

1st Quarter 2013

Here is a look at our energy consumption numbers for the first quarter of 2013. I am happy to report that the numbers look very good.

Thanks to everyone keeping a close eye on their energy consumption, and with the weather cooperating making for a warmer first quarter, we are off to a great start in 2013.

The warmer weather has helped but, in most cases, the savings are above what can be attributed to just warmer temperatures.

Natural Gas

For the first quarter of 2013, all areas are showing very good reductions in consumption, along with a few overachievers. Overall as a municipality we used 17.9% less natural gas than the same period last year, a reduction of 984 GJ. That works out to 45 tonnes of Green House Gas saved.

The following chart shows our Natural Gas consumption compared to the same period last year. Unfortunately Fortis does not read their meters on the same days each month, so when comparing to last year, some areas had 14 extra days in this billing period and others had up to 7 days less. So to come up with useable information, I used the daily averages multiplied by the same amount of days as in 2012 (so these numbers will differ from what you see on your bills).

Natural C	as Consun	nption J	anuary t	o March	2012 vs.	2013
1st Quarter	Natura	l Gas Usage	in GJ	Variance in Percentage	Ave Daily usage 2012	Ave Daily usage 2013
Site	2012	2013	Variance	%	GJ	GJ
Carnarvon	72.1	43.4	28.7	40.0%	0.79	0.48
Fire Hall/Police	148.9	125.6	23.3	15.6%	1.64	1.38
Municipal Hall	217	190.2	27.2	12.5%	2.38	2.09
Henderson	321.6	281.5	40.1	12.5%	3.5	3.06
Public Works	241.1	62.3	178.8	74.2%	2.65	0.69
OB Rec Centre	2487.1	2127.1	360	14.5%	27.9	23.9
Monterey	236.4	209.3	27.1	11.5%	2.6	2.3
Tennis Bubble	1256.6	1048.4	208.2	16.6%	14.12	11.78
Windsor	17.6	16.8	0.8	4.5%	0.193	0.185
Totals	4998.4	4104.6	894.2	17.9%	55.77	45.86

^{*}In 2012 the municipality paid \$182,692 for Natural Gas and 615.29 tonnes of GHG were attributed to our Natural Gas usage.

Public Works saved the largest percentage at 74.2%, they followed up the big savings we saw at the end of last year with more big savings in this quarter. The savings are mostly a result of behavioral changes in both the sign shop and in the garage area.

At Carnarvon, the savings came from paying closer attention to their heating needs and taking advantage of night set backs. The Fire Hall now has energy efficient windows while the Tennis Bubbles have seen better numbers since their heating system was repaired.

1st Quarter 2013

Hydro Consumption

Our Hydro consumption also shows some great results. Together we are down 72,089 kWh over the same period last year, saving another 1.8 tones of Green House Gas.

Hydro Consum	nption	1st Qu	arter 2	012 vs	. 2013	
	Н	ydro Usa	nge in kWh		Average Daily kWh	Average Daily kWh
1st Quarter	2012	2013	Variance	%	2012	2013
Carnarvon	17018	12709	-4309	25.3%	187	141.2
Fire Hall/Police	31040	26720	-4320	13.9%	526.1	460.7
Municipal Hall	30360	28920	-1440	4.7%	497.7	482
Henderson	22980	24240	1260	5.20%	249.8	266.4
Public Works	34800	32460	-2340	6.7%	589.8	559.7
OB Rec Centre	635400	579600	-55800	8.8%	6982.4	6369.2
Monterey	72960	63360	-9600	13.2%	801.8	704
Tennis Bubble	84960	87920	2960	3.4%	933.6	966.1
Windsor	28200	23940	-4260	15.1%	309.9	263.1
Totals	957718	879869	-72089	7.5%	11078.1	10212.4

^{*}In 2012, for the entire municipality, we paid \$358,786 for Hydro and 114.26 tonnes of GHG were attributed to our Hydro usage.

Again warmer weather helped our cause, especially for our buildings that use electricity for all or part of their heat, like Windsor and Monterey.

Carnarvon has had improvements made in their change rooms and Oak Bay Recreation Centre is benefiting from recent compressor and lighting upgrades. The Police/Fire is seeing a nice drop in consumption but I'm not sure about the whole reason, other than the baseball concession being properly winterized this year.

Henderson is up due to the construction and the bubbles are up as we had to add some additional lighting in the 4 court to make up for the ageing fabric not reflecting the light well. We are hoping to revert back when the new bubble is installed in September.

If you have made changes to your buildings energy usage, either mechanical or behavioral, please let me know so we can better understand the changes that we see.

1st Quarter 2013

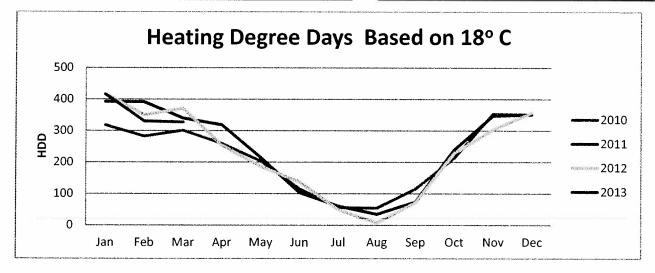
Weather

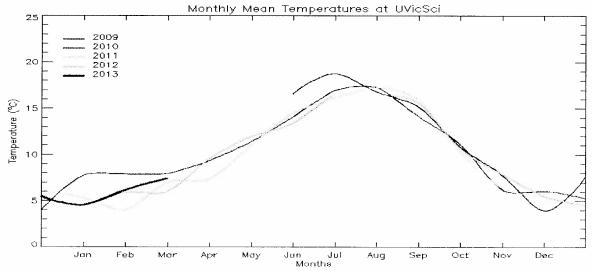
Here is a look at the weather during this period. We know that it's been warmer this year but it's hard to know exactly how much the impact is on our heating bill. Fortis tells us what the average temperature was and that helps, but it doesn't give us the whole picture. Heating degree days is a better way but there are still inconsistencies and at this time we don't have the software to best use this information for weather normalization. When we look at HHD we can see that we needed 5.6% less this year but when we look at the actual numbers it tells us a different story. My hope is that this is not just the result of warmer weather and we can take credit for some positive behavioral changes.

Heating Degree Days - From the UVIC whether site. Average Temperatures - From Fortis BC.

HDD	2010	2011	2012	2013
Jan	317.8	392	416.8	415.9
Feb	282.1	391.1	349.9	330.1
Mar	300.8	339.8	370.6	327
Total	900.7	1122.9	1137.3	1073

Average To	emperature:	s from For	tis BC
	2011	2012	2013
Jan	5	3	4
Feb	3	5	6
Mar	7	6	8

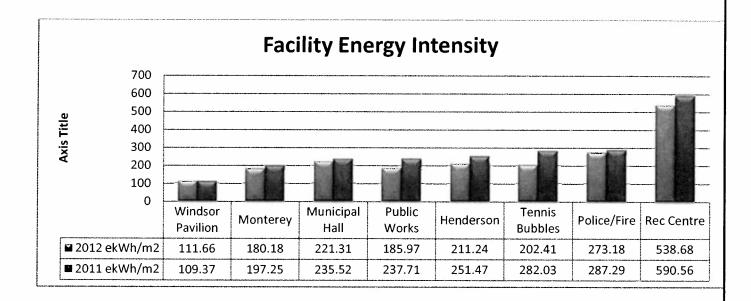




1st Quarter 2013

Building Energy Intensity Performance (BEPI)

BEPI is a tool used to compare the energy performance of various buildings and basically tells us how much energy is used per square meter. You can then look at your building(s) and the ones that need attention stand out.



I'm sharing this with you so you can see how your building compares to the other buildings and because I was delighted to update this graft and show the improvements to almost all of our buildings. Windsor is slightly up due to increased usage.

We see that even with the diversities of how our buildings are used, we are still relatively consistent. We also get to see, with Windsor Pavilion, how a newer more efficient building compares.

Recreation centres tend to be in a league of their own. Swimming pools are generally considered to use 5 times the energy of a conventional building and ice rinks are about double. So to find out how we are doing we were able to get information from several other similar facilities and found out that we use about 20 to 30% less, which is a big deal when it comes to the bottom line.

I would like to thank everyone for your help with our conservation efforts and encourage you to keep looking for energy saving opportunities. I would also like you to keep inspiring your team to continue their good work because as you can see, together we are really making a huge difference.

Ken Olson

OAK BAY PARKS AND RECREATION

STATEMENT OF REVENUE AND EXPENDITURE SUMMARY

FOR THE MONTH OF APRIL 2013

COMPARED TO THE MONTH OF APRIL 2012

	COMPARISON MONTH YEAR	(32,721) 188,863	60,835 19,912	93,556 (168,951)			
	%	38.50	33.34	23.31			
	BUDGET	6,859,265	10,385,088	3,525,823			
2012	YTD	2,640,778	3,462,712 10,385,088	821,934			
	APRIL	602,954	779,446	176,492			
	%	40.67	32.73	17.73			
	BUDGET	6,957,452	10,640,154	3,682,702			
2013	Ę	2,829,641	3,482,624	652,983		5,151	
	APRIL	570,233	840,281	270,048	•		
		REVENUE	EXPENDITURE	NET EXPENDITURE	Adjustments:	Deferred Revenue Less Advertising in 2013	

23.31

3,525,823

821,934

176,492

17.87

3,682,702

658,134

270,048

2012		
2013		
	PROGRAMS	

COMPARISON

		APRIL	YTD	BUDGET	%	APRIL	YTD	BUDGET	%	HLNOW	YEAR
AQUATICS	REV EXPEND	133,843 72,905	603,618 280,529	1,444,484 888,831	41.79 31.56	105,857 63,704	560,571 282,987	1,438,131 860,687	38.98 32.88	27,986 9,201	43,047 (2,458)
	NET	60,938	323,089	555,653	58.15	42,153	277,584	577,444	48.07	18,785	45,505
FITNESS	REV EXPEND	89,693 51,825	509,856 203,976	1,141,134	44.68 30.77	89,664 45,390	468,856 200,777	1,097,725 592,968	42.71 33.86	29 6,435	41,000 3,199
	NET	37,868	305,880	478,306	63.95	44,274	268,079	504,757	53.11	(6,406)	37,801
ARENA	REV EXPEND	61,554 19,185	287,790	682,652	42.16 35.58	52,482	261,645 85,271	671,669	38.95 35.13	9,072	26,145
	NET	42,369	201,526	440,229	45.78	33,668	176,374	428,912	41.12	8,701	25,152
COMMUNITY	REV	70,585	376,571	934,682	40.29	120,871	347,058	926,818	37.45	(50,286)	29,513
	NET NET	(10,876)	90,810	(136,395)	20.68 -66.58	43,959	65,503	1,047,181 (120,363)	26.89 -54.42	4,549 (54,835)	4,206
FOOD SERVICES	REV	36,162	137,802	351,657	39.19	29,817	138,407	383,589	36.08	6,345	(605)
(Cash Basis)	EXPEND	34,955	150,924 (13,122)	381,985	39.51 43.27	33,288	153,450 (15,043)	413,545 (29,956)	37.11	1,667	(2,526)
(Accrual Basis)		(449)	(4,816)		15.88	(5,369)	(6,146)		20.52		
PAR 3 GOLF	REV EXPEND	15,375 2,009	33,504 2,067	199,423 53,561	16.80 3.86	27,732 1,054	35,991 2,250	214,897 49,848	16.75 4.51	(12,357) 955	(2,487)
	NET	13,366	31,437	145,862	21.55	26,678	33,741	165,049	20.44	(13,312)	(2,304)

		APRIL	ΥΤD	BUDGET	%	APRIL	YTD	BUDGET	%	COMPARISON MONTH YEAI	RISON YEAR
TENNIS	REV EXPEND	33,011 17,403	211,319 66,985	475,382 216,715	44.45 30.91	31,930 18,071	225,607 76,924	482,394 236,817	46.77 32.48	1,081 (668)	(14,288) (9,939)
	NET	15,608	144,334	258,667	55.80	13,859	148,683	245,577	60.54	1,749	(4,349)
SAILING	REV	0	5,384	24,785	21.72	4,441	3,914	23,616	16.57	(4,441)	1,470
entre anti-ampuno anno	EXPEND	0	200	24,636	0.81	0	200	22,925	0.87	0	0
	NET	0	5,184	149	3479.19	4,441	3,714	691	537.48	(4,441)	1,470
Indoor Sports Field	REV	25,819	115,622	216,650	53.37	20,685	111,695	211,813	52.73	5,134	3,927
Kanada kanad	EXPEND	3,993	27,438	86,597	31.68	9,773	24,301	89,347	27.20	(5,780)	3,137
	NET	21,826	88,184	130,053	67.81	10,912	87,394	122,466	71.36	10,914	790
TEEN	REV	1,115	9,483	30,600	30.99	3,264	10,284	27,938	36.81	(2,149)	(801)
PROGRAM	EXPEND	3,913	16,964	58,783	28.86	4,462	16,442	57,426	28.63	(248)	522
	NET	(2,798)	(7,481)	(28,183)	26.54	(1,198)	(6,158)	(29,488)	20.88	(1,600)	(1,323)
MONTEDEX	05//	40.005	206 600	751 500	20.49	66 640	200 000	752 200	70.76	(76 445)	16 370
CENTRE	EXPEND	86,199	296,308	901,575	32.87	67,200	283,224	876,725	32.30	18,999	13,084
	NET	(46,104)	390	(149,987)	-0.26	(099)	(2,896)	(124,516)	2.33	(45,444)	3,286
CADA DAVCADE	DE\/	40 E 4 E	131 175	388 681	34 58	200 005	410.979	244 058	30.05	11 150	24 153
	EXPEND	25,606	105,764	329,494	32.10	22,879	95,955	302,484	31.72	2,727	9,809
	NET	14,939	28,661	59,187	48.42	6,216	14,317	41,574	34,44	8,723	14,344
	REV	547,797	2,722,072	6,641,718	40.98	582,378	2,554,628	6,574,857	38.85	(34,581)	167,444
TOTAL	EXPEND	399,454	1,523,180	4,918,505	30.97	361,547	1,503,336	4,792,710	31.37	37,907	19,844
	NET	148,343	1,198,892	1,723,213	69.57	220,831	1,051,292	1,782,147	58.99	(72,488)	147,600

	APRIL	ΥΤD	BUDGET	%	APRIL	YTD	BUDGET	%	MONTH	COMPARISON ONTH YEAR
REV	2,529	11,378	35,127 0	32.39 #DIV/0!	2,492	11,671	35,162 0	33.19 #DIV/0!	37	(293)
REV	240	961	8,200	11.72	167	167	12,475	1.34	73	794
-	2,769	12,339	43,327	28.48	2,659	11,838	47,637	24.85	110	501
	34,445	144,059	426,915	33.74	31,780	134,236	423,490	31.70	2,665	9,823
	42,201	236,401	554,995	42.60	31,938	220,487	533,138	41.36	10,263	15,914
	72,394	267,128	789,604	33.83	67,490	277,682	781,643	35.53	4,904	(10,554)
	149,040	647,588	1,771,514	36.56	131,208	632,405	1,738,271	36.38	17,832	15,183
	146,271	635,249	1,728,187	36.76	128,549	620,567	1,690,634	36.71	17,722	14,682
										ļ
	0	0	0	#DIV/0!	250	250	0	#DIV/0[(720)	(250)
	16,548	59,595	181,863	32.77	14,626	58,788	179,511	32.75	1,922	807
	107,867	456,588	1,473,800	30.98	106,116	459,504	1,445,319	31.79	1,751	(2,916)
	21,642	75,741	218,820	34.61	22,281	80,311	216,813	37.04	(639)	(4,570)
	10,755	48,341	148,808	32.49	11,655	44,893	152,981	29.35	(006)	3,448
•	156,812	640,265	2,023,291	31.64	154,428	643,246	1,994,624	32.25	2,384	(2,981)
	13,833	55,333	165,998	33.33	13,848	55,393	166,178	33.33	(15)	(09)
•	5,834	39,897	105,738	37.73	4,069	18,919	669'69	27.14	1,765	20,978
	19,667	95,230	271,736	35.04	17,917	74,312	235,877	31.50	1,750	20,918
	8,619	64,443	230,454	27.96	6,901	48,617	228,472	21.28	1,718	15,826
	1,682	2,411	21,327	11.30	0	0	0	#DIV/0!	1,682	2,411
	0	298	51,663	0.58	13,751	14,791	50,651	29.20	(13,751)	(14,493)
	8,562	67,173	126,094	53.27	5,960	53,099	123,630	42.95	2,602	14,074
	46,281	177,346	537,179	33.01	34,314	217,608	522,514	41.65	11,967	(40,262)
	5,107	20,957	21,409	97.89	0	594	20,000	2.97	5,107	20,363
	13,539	130,571	293,485	44.49	7,614	130,057	289,382	44.94	5,925	514
	284	284	2,500	11.36	0	0	2,500	0.00	284	284
	10,696	52,218	154,529	33.79	12,322	60,973	149,076	40.90	(1,626)	(8,755)
	20,192	75,259	283,147	26.58	22,705	79,137	275,057	28.77	(2,513)	(3,878)
	19,137	78,805	180,007	43.78	27,100	76,116	172,711	44.07	(7,963)	2,689
	0	0	5,500	0.00	0	148	5,500	2.69	0	(148)
	06	139	12,778	1.09	181	181	12,543	1.44	(91)	(42)
	134,189	669,904	1,920,072	34.89	130,848	681,321	1,852,036	36.79	3,341	(11,417)
				•		;				(100

0 (717)

717