



Corporate Report

NO: R219

COUNCIL DATE: November 3, 2008

REGULAR COUNCIL

TO: Mayor & Council DATE: October 30, 2008
FROM: General Manager, Engineering; FILE: 5280-01
General Manager, Parks, Recreation and Culture
SUBJECT: Sustainable Initiatives under the *Nature Matters* Program

RECOMMENDATION

It is recommended that Council receive this report as information.

BACKGROUND

In 2006, Surrey City Council approved the implementation of *Nature Matters*, a comprehensive program that demonstrates Surrey's commitment to the environment. *Nature Matters* is a program that encompasses all environmentally oriented efforts by the City and delivers them in a more comprehensive way. More specifically, the program focuses on:

- Educating and engaging Surrey residents in relation to the environment;
- Increasing youth involvement through environmental stewardship activities;
- Encouraging volunteerism in one of the many programs that are part of *Nature Matters*; and
- Working closely with the School District, teachers and students to provide environmental education opportunities.

DISCUSSION

Reaching out to the community through educational initiatives is an essential part of developing a sustainable community. In 2008, through *Nature Matters*, staff has developed programs and outreach campaigns on various topics related to the environment. The following are some examples of the 2008 initiative:

Education about the Environment in Surrey's Schools

Environmental education programs for students can be an effective way of encouraging younger residents to be actively involved in the stewardship of the City's natural environment. Staff has been actively involved in working with School District #36 and teacher organizations to develop in-class resources and field trips for teachers. This support that correlates well with the Ministry of Education's curriculum standards makes it easier for teachers to include environmental education in their lesson plans.

Recent initiatives for teachers and students include:

- The development of a Resource Guide, the 'Environmental Education Compendium', to assist teachers in connecting with local, environmentally themed programs and resources for their classes. The Guide now lists over 60 resources available for teachers and is accessible on Surrey's website.
- In-class presentations are provided to Grade 11 and 12 social studies classes to provide students with local examples about environmental issues and planning in Surrey. These interactive presentations cover geographically related water management operations, climate change considerations and opportunities surrounding development and sustainability.
- *Nature Matters* was invited for a third consecutive year to provide environmental education information to teachers at the Surrey Teachers Association (STA) Convention in May. Two workshops were conducted at the Convention. A sustainability-themed workshop was offered to help teachers incorporate an environmental component in their teaching plans, which included information pamphlets themed on 10 different topics that teachers could take away with them at the end of the day. The second workshop focused on encouraging teachers to use their local park natural areas for exploration and learning about nature. Teachers were taught how to use the COSMOS mapping system to find local resources, and given resource materials with ideas about activities with which their classes could be engaged in local parks as an outdoor classroom.
- Surrey's Salmon Habitat Restoration Program (SHaRP) was active in all the high schools in Surrey, promoting environmental protection and providing high school students with summer work experience. In-class presentations were offered about the Program and the work being conducted by the SHaRP teams.
- Staff continued to provide opportunities for youth to get involved in hands-on stewardship activities in park natural areas. Fifteen stewardship projects were conducted with secondary school groups. These included invasive plant removal, tree planting and other habitat creation. These projects encourage students to feel a sense of ownership over their local parks and provide exposure to environmental volunteer opportunities within Surrey.
- Class activities and presentations are being developed for teachers to support the change in the Ministry of Education's requirements for topics covered within Science

10 classes. These options will support teachers in educating about the environment, such as pollution concerns, climate change and sustainability.

- The new Surrey Nature Centre at Green Timbers that was opened by the City this year has developed nine curriculum-based education programs for elementary grade levels. Staff worked closely with members of the Surrey School District to create these programs and ensure they meet teachers' needs. The initial response has been very favourable.
- A new school-based program is being developed this fall to educate students about the environmental work and volunteer experiences that are available to them, as well as to foster environmental action through community based projects. Called 'Your U-turn', this program will incorporate a fun in-class component to inform students in Planning 10 classes about the opportunities while educating them about Surrey's environment. After the in-class experience the students can log on to an online planning tool that helps them select environmental experiences or action projects that are interesting to them. Through these experiences and projects, the students will obtain their required work experience hours and the community will benefit through completion of sustainability projects. Opportunities will be developed in the areas of transportation methods and anti-idling, habitat enhancement, agricultural awareness, and artistic awareness campaigns.

Educating Residents About Sustainability & Community Outreach Programs

There are many resources and new technologies being developed around the topic on sustainability. For the average resident it may be difficult to assimilate all this information or know what they can do to help the environment. Through *Nature Matters* initiatives, the City is attempting to provide information to the public in a variety of ways to help people take advantage of the opportunities around them.

- The East Clayton sustainable community is an excellent example of some of the techniques that can be employed in a residential community to foster sustainable actions. A brochure was developed in 2007 to assist with educating the community about all the sustainable features in this area. To supplement this material, an interactive web-based education tool is being developed to broaden the learning opportunities associated with this community's features to a wider audience outside of this community so that many people can benefit from the East Clayton experience. This information will be available as a link from Surrey's website in the next few months and it will incorporate activities to engage people in virtual walking tours of the community as well as a design game feature that enables the participants to view the functionality of all of the features of the community and how they work toward increasing sustainability. A school component will also be developed so that teachers can incorporate this learning tool into their classroom teaching plans.
- Staff is completing work on the development of a sustainability-themed brochure series to assist residents in changing aspects of their daily lives to become more sustainable. The series commenced in 2007 with development of a brochure on East Clayton sustainability features and a brochure on the environmental considerations in the Campbell Heights business area. Brochures completed at the beginning of 2008

addressed more generic sustainability topics that are useful for everyone. The series is being further built upon through the development of an energy conservation brochure.

- A pilot water conservation program was developed to educate residents about how to save water. The program, called 'Operation Save H2O' was targeted toward high consuming properties that are on water meters. Eight students traveled throughout Surrey primarily on bicycle to provide information to over 2200 homes over an eight-week period. These students answered the homeowner's questions and offered helpful tips on how to save water, while also collecting useful information about water consumption in the City. Staff will be comparing the water usage data of these targeted properties before and after the campaign and reporting on the results.
- A multi-faceted storm drain education program is being developed to teach people about the importance of pollution prevention in our storm drain system. Informative metal storm drain plates are being installed at City facilities over the next few months to provide a clear message about storm drains and their relation to fish habitat. To supplement this community-wide information program, an awareness and action initiative called 'Salmon Tracks' is being started this fall to engage school classes, community groups, organizations and individuals in marking roadside storm drains with the recognizable yellow fish stamp designed by Fisheries and Oceans Canada. The *Salmon Tracks* program will provide informative presentations about the issues surrounding storm water runoff and assistance in designing drain marking programs.

Agricultural Awareness

Educating the community about the value of Surrey's local agriculture has multiple benefits to Surrey's environment and economy. City staff is actively involved with the Agricultural Advisory Committee (AAC) to create educational campaigns to inform the public about agriculture and the benefits of buying local products.

- Road signs have been developed in conjunction with the AAC and in consultation with the Transportation Section to educate the community about Surrey's agricultural areas. The first 12 signs displaying Surrey's 'Farm Fresh' logo will be erected this fall along arterial roads leading into and out of the Agricultural Land Reserve.
- Farm market signage has been developed to inform consumers of the benefits of buying local foods. This series of 3 signs will be made available to farm markets in early 2009 following completion of farm market research studies being conducted this fall.
- Nature Matters created an agricultural display for the Cloverdale Rodeo in the spring. This display was located in the popular farm animal barn to engage residents that are interested in learning about local agriculture and local food products that are available. The display included an agriculture trivia booth, local producer displays, a maze made out of straw bales and included an interactive game regarding local livestock. Over 1500 participants used the maze over the duration of the event.

- *Nature Matters* staff assisted in planning the inaugural ‘Flavours of Surrey’ event that occurred in July under the oversight of the AAC. Staff helped with providing event resources, event suggestions and staff support during the event. Over 300 people participated in this event.
- For a second year, UBC students are conducting research into the barriers to buying from local producers and effective means to promote locally-produced food. Twelve students will be engaged in researching local agriculture issues in Surrey this fall. This research will be used to update the Farm Fresh Guide to encourage buying from local farmers and to inform future endeavours related to enhancing local agriculture.
- *Nature Matters* booths and displays have been brought to Surrey Farmers Markets to engage with the public and support has been provided to the event organizers to encourage development of the market. Materials and City attendees interact with both youth and adults to enhance awareness of the City’s efforts through the *Nature Matters* program and to encourage full participation in Surrey’s local agricultural offerings.

Community Education on Natural Areas and Benefits of Trees

- *Nature Matters* also focuses on educating the community about the benefits of contributing to Surrey’s urban forest by “greening” their own property with trees and other vegetation. Several brochures and regular newspaper advertising focused on the benefits of backyard trees, as well as boulevard trees. Residents without sufficient space for trees are encouraged to garden on their balconies or small yards to support local wildlife such as birds and butterflies. To encourage these efforts, a native plant sale was held at Surrey’s *Earth Day* event, and staff provided information and advice to residents through various events throughout the City during the spring and summer.
- In collaboration with the Green Timbers Heritage Society, a tree sale was organized at Surrey’s *Earth Day* and *Arbor Day* events, at which over 200 dogwood trees were sold to Surrey’s residents at low cost.
- The dumping of yard in Surrey’s natural areas is a problem as such activities introduce invasive plant species into City parks. Outreach to over 400 residents was undertaken by the Surrey’s Natural Areas Partnership (SNAP) team in neighbourhoods adjacent to parks with ongoing dumping problems. Brochures were distributed and signage erected to alert neighbours to the problem, and to the restoration work undertaken by the SNAP students to remove the dumped yard waste and rehabilitate the parks.
- SNAP’s Environmental Education team provided fun and interactive nature programs to children throughout Surrey, with topics like forest habitats, amphibians, bugs, birds and more. Nearly 800 children participated in programs offered in parks, libraries and community centres throughout Surrey, and at the Surrey Nature Centre.

Volunteer and Community Stewardship Initiatives

- The *Surrey Youth Stewardship Squad* (SYSS) continued to attract secondary school-aged students in volunteer stewardship activities. Students are actively involved in the program and participated in 15 hands-on stewardship projects. To encourage involvement in the Stewardship Squad, staff made outreach presentations to Environment and Global Issues Clubs at local schools.
- *Friends of the Forest* are volunteers involved in stewardship of Surrey's natural area parks, such as planting native trees and shrubs, removing invasive plants and garbage, and reporting graffiti. In 2008, over 100 Surrey residents were actively involved in the program. In addition to these individuals, the program has expanded to include numerous groups from the community, such as Scouts and Girl Guides, support groups for individuals with special needs, Surrey Youth Council, Young Naturalists Clubs, and corporate volunteer groups. City staff supported 24 volunteer projects carried out by these groups.
- *Eco Ranger* volunteers help patrol Surrey's most significant natural area parks, acting as ambassadors to answer questions and provide information to park visitors about the park's natural values. In 2008, 27 volunteers spent over 500 hours in parks and at special events and made contact with over 1500 park users.
- The SNAP Habitat Restoration Team was actively involved in hands-on stewardship work in Surrey's parks. The students removed 95 truckloads of invasive plants and yard waste from natural areas, removed unsanctioned trails through environmentally sensitive areas, and took part in several specialized wildlife habitat projects.
- Now in its 18th year, the *ReLeaf* tree-planting program continues to work with schools and the community to plant trees and shrubs in parks and along boulevards. This year, in combination with *Maple Leaf Day* and *Arbor Day*, volunteers planted over 16,000 new trees as part of this program.
- Staff continued to work with our community partner groups such as Sunnyside Acres Heritage Society, Friends of Semiahmoo Heritage Trail, Green Timbers Heritage Society, and Friends of Semiahmoo Bay Society (Birds on the Bay) to support their volunteer initiatives. Staff helped coordinate numerous tree planting and invasive plant removal events in Surrey's parks, in partnership with these groups, and also coordinated closely with Friends of Semiahmoo Heritage Trail on the construction of a new information kiosk.

Community Festivals with an Environmental Focus

- The 3rd annual *Nature Matters Summerfest* event was held at Bear Creek Park in July. This year the event highlighted the important work of students involved in the SNAP and SHaRP programs, as well as *Surrey Youth Stewardship Squad* and *Eco Ranger* volunteers. The event featured a series of "passport" activity stations, nature walks, natural area planting, bird box building, and ladybug release. Approximately 1000 citizens attended.

- Staff, in partnership with the Green Ideas Network, hosted the second annual Environmental Film Festival in April. The event was expanded into South Surrey this year, with films being hosted at SFU Surrey campus and Semiahmoo Secondary School. For the first time this year, local secondary and post-secondary students were invited to enter the Environmental Student Video contest, with the winning students' entries being shown to the public at the opening of the film festival. This was a means of engaging another segment of the youth population, and gave students a creative opportunity to voice their feelings about environmental topics through film.
- The *Environmental Extravaganza* continues to engage the community in learning about and celebrating Surrey's natural environment. This event, that is held over a weeklong period of time, was the 11th annual *Extravaganza*. It was the largest yet with 85 public events attracting participation of over 25,000, an increase of 35 new programs compared with the previous year. Events included nature walks, hands-on workshops, stewardship projects and school programs,
- This fall, the 11th annual *Salmon Homecoming* will be held to celebrate the return to Bear Creek of wild salmon. This event allows participants to view spawning salmon, and connect with local stewardship groups working to preserve and restore salmon habitat.

CONCLUSION

Surrey's *Nature Matters* program continues to engage large numbers of Surrey residents and businesses, increase environmental awareness and foster environmental stewardship at all levels of our community.

The large number and wide breadth of initiatives under the *Nature Matters* program is impressive and highlights Surrey's commitment to the environment and sustainability.

Laurie Cavan
General Manager
Parks, Recreation & Culture

Vincent Lalonde, P.Eng.
General Manager
Engineering

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