Prepared for Green Communities Edmonton Association

Sustainable Communities for Mill Creek Project

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April 2003

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Executive Summary : introduction

Green Communities Edmonton Association (GCEA), an Edmonton-based, not-for-profit environmental organization, commissioned this survey to assess the impact of the Sustainable Communities for Mill Creek Project (SCMC) on the sustainable-living behaviours of its participants. With the addition of two more information objectives, the survey grew to become the Mill Creek Sustainable Living Survey. This is not a scientific study. All findings need to be viewed with awareness of certain limitations.

The respondents are 60 of 150 total participants in the Sustainable Communities for Mill Creek Project. They are an environmentally aware and motivated group living in a unique area of Edmonton. Any generalization of this data is not recommended. Also, the respondents demonstrate such a positive attitude toward sustainable living that it can be assumed all answers are weighted toward a positive response.

This survey covers behaviours (eg. riding a bike to work, installing compact fluorescent lightbulbs) not actual amounts (kms of vehicle travel avoided, watts of electricity saved). More in-depth surveying on any one indicator would be required to assess the real ecological impact of sustainability initiatives. The MCSLC heads in the right direction and could be used as a starting point.

The telephone survey covers ten “indicators of sustainability”, that is ten areas where individuals and families can reduce their impact on the environment in their day-to-day lives. During each multi-part indicator question, the respondent is asked whether their household chooses to reduce their impact on the environment in a general way (eg. by reducing household waste going to the landfill). Then they are asked which specific strategies are used (eg. reduce disposables, composting, recyling, etc). The respondent is then asked, for those lower-impact modes or strategies used in 2003, was it more, less or about the same as previous years. This recall data is not considered a very reliable measurement of change. In retrospect, baseline studies should have been done at the beginning of the project to confirm these changes.

The respondent is then asked whether their family or household has ever wanted to use any of these modes or strategies but encountered a barrier. Often lack of knowledge is a barrier; sometimes it is “how-to” knowledge, and sometimes “where to” get the supplies they need. This data might be useful for local NGOs and businesses who are providing information, products and services. Over all, this respondent group demonstrates a high motivation to shop, learn and adapt their lives for sustainability.

Finally respondents are asked about their impressions of the SCMC project. Respondents are generally positive about the effect of the project, particularly as providing a reminder or encouragement to take action. In retrospect, a comparision group should have been surveyed to confirm this data. The community focus of the project is praised. Better communications from GCEA throughout the course of the SCMC might have further enhanced participation.

The most definite finding arising from this study is that there are at least sixty Mill Creek residents who have a positive attitude and are knowledgable about sustainable living. They are motivated within their own lives - this is a topic that generates much enthusiasm - but many are also wanting to take things to the next level and work on sustainability from a community perspective. Almost all respondents gave permission for their contact information to be passed on to a homegrown Mill Creek sustainability group of some sort. It is also pointed out that most community leagues have websites in place. The most important recommendation, therefore, is to take the information and experienced gained from the SCMC, and this contact list, and use it to kickstart an ongoing sustainability movement within the Mill Creek communities.

Barb Allard,
Edmonton, April 2004

Executive Summary : methodology

Objectives

Green Communities Edmonton Association (GCEA), an Edmonton-based, not-for-profit environmental organization, commissioned this survey to meet some of the information goals of the Sustainable Communities for Mill Creek Project (SCMC). The survey is designed to find out:

1. What sustainable activities have project participants improved upon over the past year (in 2003) since the SCMC started?
1.a. What sustainable activities do participants plan to add over the course of this year (2004)? (This data is compiled but not analyzed yet.)
2. What was the influence of the SCMC in these improvements? General comments on any influences? Suggestions for the future?
3. What sustainable activities are participants most engaged in in the Mill Creek communities?
4. What sustainable activities would participants like to start/improve.What are the barriers to these improvements? How could future community outreach help them overcome these barriers?

Methodology

The Mill Creek Sustainable Living Survey is a phone survey. The questionnaire covers ten “indicators of sustainability”, that is ten general ways that individuals and households can reduce their impact on the environment in their day-to-day lives.

Each multi-part indicator question asks whether the respondent chooses to reduce their impact on the environment in a particular way. Then a number of lower-impact modes or strategies are given. These range from low-tech/low-cost to the more expensive or time-consuming alternatives. The respondent is then asked, for those lower-impact modes or strategies used, did it increase in 2003 over previous years. The respondent is then asked whether they have encountered barriers to any of these modes or strategies. Finally, they are asked if there are any plans to increase these lower-impact behaviours over the course of 2004. After the ten indicator questions, there is a multiple-choice question regarding whether the SCMC had any influence in the respondent’s decision to add or increase modes or strategies in 2003. Finally, comments are transcribed.

The respondents are 60 of 150 total participants in the Sustainable Communities for Mill Creek Project. They are an environmentally aware and motivated group living in a unique area of Edmonton. Any generalization of this data is not recommended. The respondents demonstrate such a positive attitude toward sustainable living that it can be assumed their answers are weighted toward a positive response.

The survey measures attitudes and makes suggestions about levels of awareness of the impacts of our day-to-day behaviour on the environment. Behaviours are noted, i.e. cycling to work regularly or eating more organic food, but there are no amounts of anything (i.e. total kms cycled or dollars spent). Due to shortages of time and money for survey design, there are some issues with both the reliability and the validity of the questions.

Each survey took on average 51 minutes to line up and deliver. There was a very low refusal rate among those respondents reached by phone. Respondents were extremely forthcoming with information.

For the purposes of this report, the quantitative “behaviours” data is converted to percentages and placed on bar graphs. The short-answer “barriers” data is aggregated and translated into quantitative data. The qualitative project summary data is summarized as a short report. The “plans for 2004” data is not reported due to time and budget constraints.

Executive Summary : Findings

Transportation

Eighty-seven percent of respondents reduce their use of the private automobile on a weekly basis. They use a variety of lower-impact modes of transportation for regular trips. Cycling, using public transit and walking are the most popular. Forty-two percent of respondents would like to use more public transit, but are experiencing a barrier. Over half used at least one mode more in 2003 than previous years.

Almost all respondents with vehicles use at least one strategy for reducing vehicle emissions. Regular maintenance is the most common strategy, but seventy-nine percent also adopt driving habits for reducing emissions. One-third of respondents would like to purchase a more efficient vehicle, but are experiencing a barrier.

Food

Seventy-eight percent choose to limit their consumption of meat and seafood on a weekly basis. The majority consumes strictly vegetarian meals on a weekly basis. One-quarter of respondents would like to eat more vegetarian meals, but are experiencing a barrier.

Ninety-two percent of respondents consume either organic, locally grown or food from their own gardens on a regular basis. Most do all three. This indicator is on the increase among seventy-two percent of respondents. One-quarter of respondents would purchase more organic food, except for a barrier.

Household Operations

Eighty-three percent of respondents choose non-toxic (or less-toxic) alternatives to the regular brands of household products. Almost one-third increased this in 2003. The most common types of products chosen are cleaners, and this is also the product most desired by respondents experiencing a barrier.

All 60 respondents, but one, use some method of reducing the amount of waste going to the landfill. The methods include reducing, re-using and recycling (and proper disposal of household hazardous waste). At 95%, recycling is the most common method. Over half of respondents found a way to increase at least one of these methods in 2003, most having purchased more bulk (less-packaged) items. One-fifth of respondents would like to compost more, but the barrier is most often lack of knowledge.

The three indicators that deal with conserving water, heat and electricity are all at a very high participation rate, above ninety-percent. Over eighty-percent of respondents conserve by “using carefully”. Other strategies drop off from there, perhaps in relation to the cost and difficulty involved. The most desired conservation strategy is capturing more rainwater. There are a variety of barriers sited, including finding the right rain barrel and living in an apartment.

Lawn & Garden

This is a dynamic indicator for many reasons, including the fact that these primarily outdoor activities tend to attract attention from the neighbours, either in cooperation or conflict. Overall participation in at least one method of eco-friendlier lawn & garden care is high, at 93%. Going completely organic (no chemicals at all) is chosen by three-quarters of respondents. Conversely, the least-used method is reducing, but not eliminating, pesticides and herbicides. About one-fifth would like a wholescale eco-scaping of the yard (all methods). Major barriers are cost and time, though concerns about appearance and the neighbours are mentioned as well.

Executive Summary : Findings (cont'd)

Project Assessment

Seventy-two percent of respondents say the Sustainable Communities for Mill Creek project helped them to reduce their impact on the environment in 2003. Half (50%) said the project provided a reminder or encouragement to take action. This was closely followed by the 43% who said they were provided with information that helped them to take action. Comments were generally positive about the project, but there were some problems noted with the communications strategies employed by Green Communities Edmonton.

Conclusions

Activity in all indicators is above eighty percent, but this measures behaviours and attitudes not actual quantities of anything. The highest level of activity is in electricity conservation, with one hundred percent of respondents finding some way to reduce their electricity use on a daily basis. Improved vehicle efficiency and reducing the amount of waste sent to the landfill are also impressive, with 98% of respondents engaged in each of these indicators. Purchasing non-toxic products has the lowest participation rate, but 83% of respondents are engaged in this indicator.

Conserving electricity is also the most improved indicator, with 78% of respondents employing more conservation strategies in 2003 than previous years. Eating lower-impact foods is next, at 72%. The least improved indicator, at 30% more in 2003, is reducing the use of household toxic products.

The areas where respondents are experiencing the most barriers are using public transit and eating more organic food, at 42% each. The most common barrier for public transit is the lack of "good routes", particularly from Mill Creek to the outlying areas of the city. Lack of knowledge of where to aquire and how to employ some strategies is often sited. This is one area that could be followed up on by local NGOs and businesses providing information and eco-friendly products and services.

Seventy-two percent of respondents say the Sustainable Communities for Mill Creek project helped them to reduce their impact on the environment in 2003, but there is a strong motivation to respond positively so this number is not reliable. Comments are generally supportive, with emphasis on the importance of providing a reminder or encouragement to take action. The communications strategies employed by Green Communities Edmonton could have been better. The community focus of the project is something that can be built upon. Most respondents are interested in hearing about onging community-based sustainability initiatives.

Recommendations

1. Foster an Ongoing Mill Creek Sustainability Working Group

Use the respondent email list to recruit members for a homegrown Mill Creek sustainability working group. Make all information and experience gained with the SCMC available to this group so they can organize their own ongoing initiatives. An annual Mill Creek Eco-fair, plus rotating meetings at community halls one to three times a year, is recommended for community building and hands-on learning. An ongoing internet presence should be considered, in the form of a monthly newsletter, or listservice, a website, chat rooms and/or bulletin boards. There should be ongoing partnerships with local businesses providing environmental products and services. Prizes and giveaways from these businesses, though not a huge motivator for change, are a fun way to reward those residents doing the most within their own lives and for community sustainability. Also, people learn where to access these products and services, and these businesses help with promotion of events.

2. Better Communications and Control-group, Baseline surveying

The Sustainable Communities for Mill Creek project is going in the right direction, but there are three flaws identified, mostly due to lack of resources and the fact that it is a pilot project (hindsight is 20/20). a) Email messages to participants should be shorter, more frequent and more clearly written. All promotional activities should be enhanced. Recommend more resources and expertise toward this. b) Baseline surveying should be done ahead of time to properly measure real changes in behaviour. To properly assess the impact of the SCMC, a control group should be surveyed. Recommend more resources and expertise toward this. c) The project should be carried out with the intent of fostering a locally-grown, community-based sustainability movement right from day one. The Mill Creek experience suggests this is possible. Recommend making this a primary goal of any future projects.

3. Work Carefully with Barriers Data, Implement Low-cost Follow-up

Barriers data is not entirely valid, so more study should be done before spending too much money on any of these recommendations. a) The data does suggest that many respondents would use public transit for more weekly trips if there were good routes from the Mill Creek area to outlying areas of the city. Recommend more study to determine, first of all, if the lack of good routes is perception or reality. Car-pooling clubs to some of these suburban destinations (eg. large shopping centres, sports facilities) might be an interim solution. b) Many respondents say they would eat more organic food, but are experiencing a barrier. The data suggests that consumption of organic food is on the increase. Recommend further surveying to confirm that market forces are indeed working to increase consumption of organic food in the Mill Creek communities. c) Lack of knowledge exists as a barrier to composting, consumption of more vegetarian meals, planting native plants, purchasing rainbarrels and any number of specific strategies. Recommend low-cost, targeted information campaigns, in partnership with an onging Mill Creek sustainability group (if existing) or carried out by local businesses and NGOs.

People Involved

This survey is the work of Barb Allard, environmental communications practitioner, while temporarily employed by Green Communities Edmonton Association (GCEA). Barb wrote the survey questionnaire, conducted the telephone surveys, compiled and analyzed the data, and wrote this report. She worked under the supervision of Richard Merry, director of Green Communities Edmonton Association.

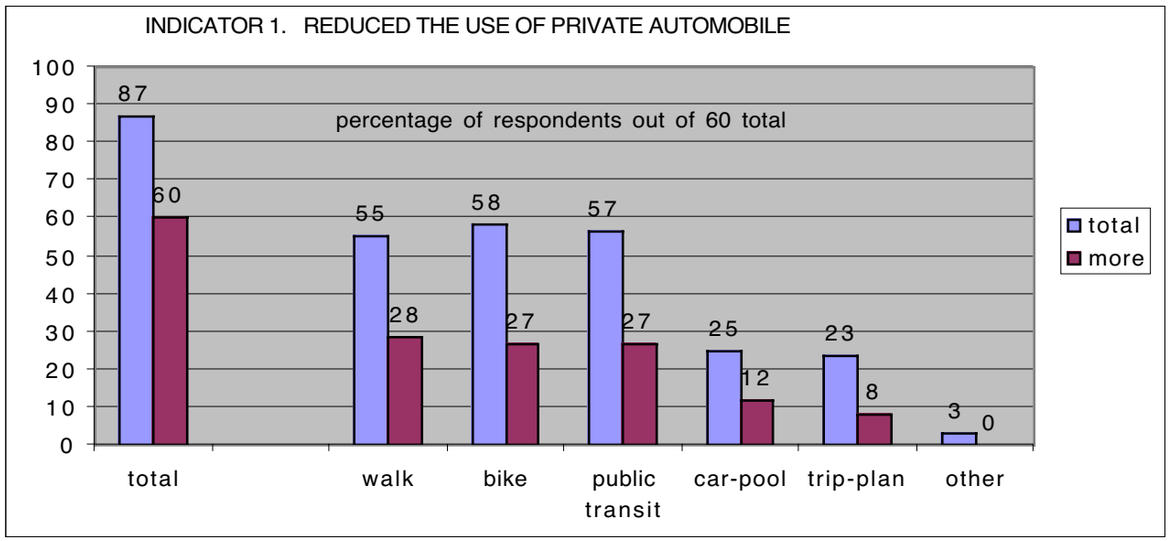
Jill Kirker of Alberta Eco-trust provided guidance in the development of this survey. Alberta Eco-trust and Shell Environmental Fund are both supporters of the Sustainable Communities for Mill Creek (SCMC) project. GCEA gratefully acknowledges their financial support.

The MCSLS questionnaire is based on the SCMC Preliminary Survey, which was written and designed by Richard Merry, and analyzed by Richard Merry and Barb Allard. GCEA gratefully acknowledges the Preliminary Survey focus group, volunteers from the Mill Creek community, for their insights and help in the development of this questionnaire.

The four program areas, upon which the SCMC is base are borrowed from the work of the Union of Concerned Scientists (http://www.ucsusa.org/index.cfm). The "10 indicators" idea is borrowed from David Suzuki's Nature Challenge. (http://www.davidsuzuki.org/WOL/Challenge/)

GCEA also gratefully acknowledges project participant and environmental economist, Mark Anielski, for creating our own ten-step program, the "Mill Creek Sustainability Challenge". Some ideas for the survey questionnaire are borrowed from this work. Finally, Barb thanks Butch Nutter, Mill Creek resident and social policy analyst, for insights into the limitations and opportunities inherent in this survey data.

Indicator 1 Reduced the Use of Private Automobile



Does your family limit the amount of single-person auto trips made on a weekly basis?

If so, which lower-impact modes of transportation do you use?

For those modes chosen in 2003, was it more, less or about the same as previous years?

Mill Creek Sustainable Living Survey

Findings

The large majority of respondents are engaged in reducing their use of the private automobile for single person trips - 87 percent. Many use more than one alternative mode of transportation, mixing and matching depending on the destination, available resources, routes, etc.

The most commonly used alternative modes of transportation are cycling, with 58% of respondents cycling to some regular destinations, using public transit (57%) and walking (55%). Car-pooling and trip-planning are not as popular, with 25% car-pooling to some destinations and 23% reducing auto trips by saving up errands and doing many at once, thereby reducing total mileage.

More in 2003...

Sixty percent of respondents increased their use of an alternative mode of transportation in 2003. The most significant increases are walking (28%), cycling (27% and using public transit (27%).

Barriers

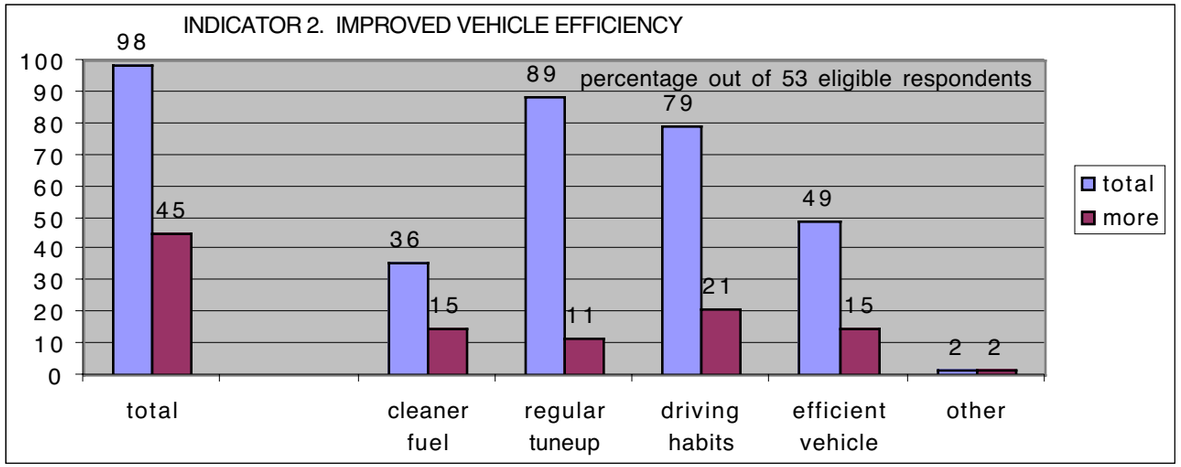
Q. “Has your family ever wanted to use any of these lower-impact modes of transporation, but experienced a barrier?”

The mode most mentioned is public transit. Twenty-five of 60 respondents (42%) claim they would use public transit for more weekly trips if not for a barrier. 21 of 25 describe the barrier as being “lack of good routes”, particularly from Mill Creek to the outlying areas of the city and surrounding cities (eg. Fort Saskatchewan). 12 of 25 describe “frequency of service” or “time considerations” as the barrier.

Second most desired mode is cycling to more regular destinations: 90 of 60 respondents (32%). Barriers to cycling are a lack of safe routes (8/19), lack of intermodal facilities (ie. bike racks on buses) is a barrier for 3 of 19. (Included in this group is one participant who mentioned the hills in Edmonton as being a barrier to cycling more.) The attitude of teenaged children that cycling to school is “not cool” is a barrier to 2 of 19. Lack of a shower at work is a barrier for one respondent.

Car-pooling is the third most desired mode, with 4 of 60 (7%) eligible respondents saying they would do this more. The barrier which could be addressed is the lack of connection with people to car-pool with (1/4).

Indicator 2 Improved Vehicle Efficiency



Does your family take steps to reduce the emissions from your vehicle?

If so, which strategies for reducing vehicle emissions do you use?

For those strategies used in 2003, was it more, less or about the same as previous years?

Mill Creek Sustainable Living Survey

Findings

Fifty-three of 60 respondents own cars so are eligible for this indicator. Almost all (98%) take some steps to reduce the emissions from their vehicle.

Regular maintenance is the step most commonly taken, at 89% of eligible respondents. When it is explained which driving habits reduce emissions - trying not to idle, warm up your vehicle, or speed excessively - 79% of respondents say they take some or all of these steps.

Slightly less than half of respondents (49%) purchased a vehicle that they feel is efficient, and (36%) purchase cleaner fuels (described as higher ethanol or any lower-emission fuel than gasoline) on a regular basis.

More in 2003...

Forty-five percent of respondents made improvements in this indicator in 2003 over previous years. The most significant improvement is in the area of driving habits; 21% of respondents.

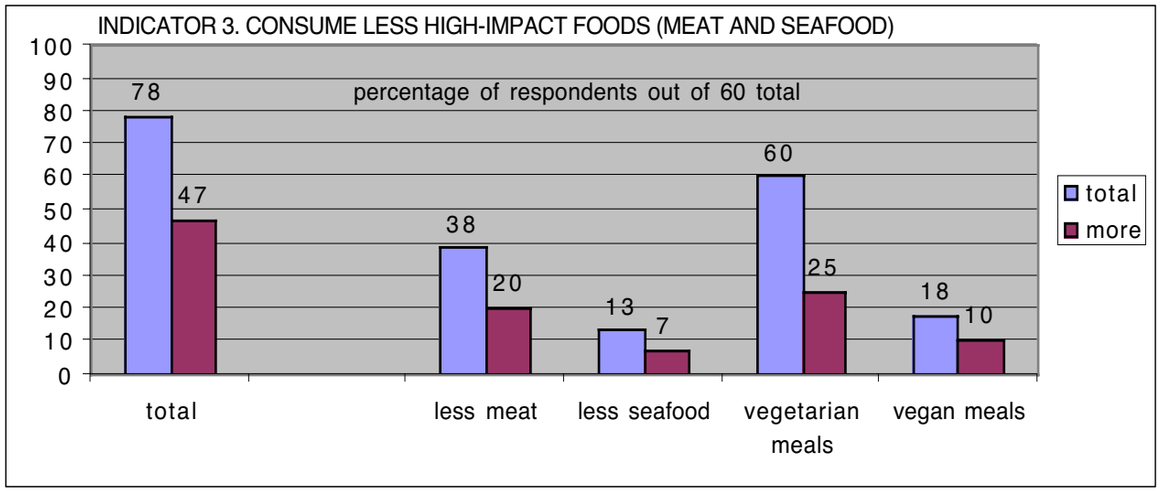
Barriers

Q. “Has your family ever wanted to use any of these emissions-reducing strategies, but experienced a barrier?” Seven respondents are ineligible for the entire indicator because they do not own a vehicle, so totals are out of 53.

The strategy most mentioned is purchasing a more efficient vehicle. Eighteen of 53 eligible respondents (34%), declare they would purchase an efficient vehicle except for a barrier. The types of more efficient vehicles desired include hybrid cars and fuel-cell cars. The most frequently sited barrier is cost (11/18), next is lack of availability of a vehicle that suits their needs (eg. hybrid min-van) (4/18). Lack of information about the technology (2/18) and questions about the quality of the new technology (2/18) are also barriers.

Second most mentioned strategy is using cleaner fuels (explained as higher ethanol gasoline or any lower-emissions fuel than gasoline). Twelve of 53 respondents (21%) would use these types of fuels except for a barrier. The largest barrier is cost (8/12), followed by lack of info about which fuels provide an environmental benefit (5/12) and availability (2/12).

Indicator 3 Consume Less High-impact Foods (Meat & Seafood)



Does your family limit consumption of meat or seafood on a weekly basis?

If so, how would you describe the lower-impact meals your family chooses?

For the meals consumed in 2003, was it more, less or about the same as previous years?

Mill Creek Sustainable Living Survey

Findings

Seventy-eight percent of respondents choose to limit their consumption of meat and seafood on a weekly basis. All 60 respondents are considered eligible for this indicator, though two mention they would not consider this due to cultural reasons: a person of Aboriginal descent (meat) and a person from Nova Scotia (seafood).

The majority in this indicator (60%) choose to have strictly vegetarian meals on a weekly basis. Thirty-eight percent have meals described as containing "smaller portions" of meat. Health considerations, rather than environmental, are often mentioned as the reason for this reduction. Eighteen percent are consuming strictly vegan meals on a weekly basis.

More in 2003...

Almost half of respondents (47%) limited their consumption of meat and seafood more in 2003 than previous years. The most significant trend is consuming strictly vegetarian meals on a weekly basis; 25% of respondents increased this in 2003.

Barriers

Q. “Has your family ever wanted to eat more of these lower-impact meals, but experienced a barrier?

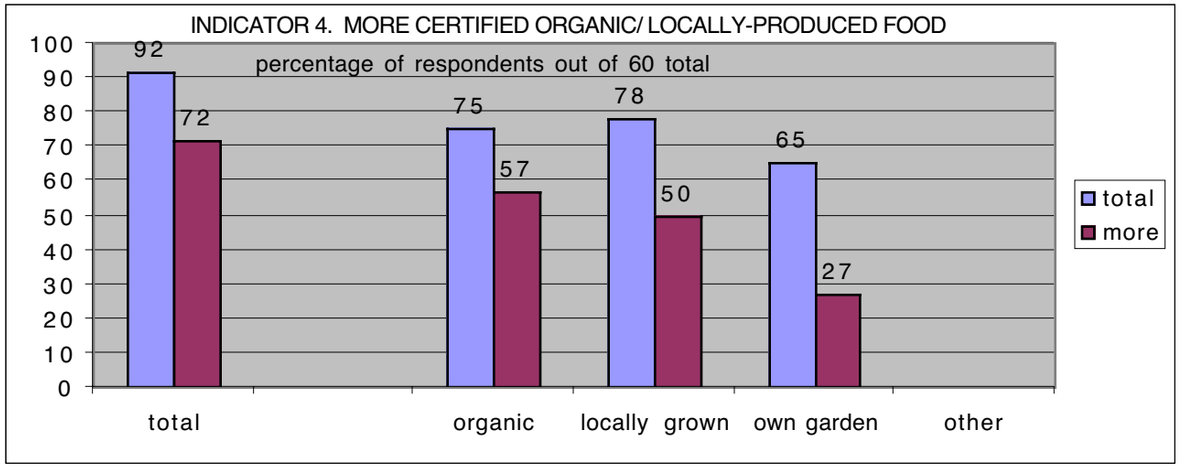
Barriers for all types of lower-impact meals are described as being cost, nutritional concerns, taste/family preference, lack of availability when eating out, and knowledge of good recipes and proper preparation.

Fifteen of 60 respondents, or 25%, claim they would like to eat more vegetarian meals. The most common barrier is knowledge (5/15), then nutritional concerns (4/15), followed by a lack of choice when eating out (3/15). Finally (2 of 15 each) are cost and taste/family preference.

Four of 60 respondents (7%) desire to reduce the quantities of meat in their meals. Barriers to this are taste/family preference (3/4), nutritional concerns (2/4) and knowledge (1/4).

Three of 60 respondent (5%) would consume more vegan meals except for a barrier. The barriers are, one of each, choice, knowledge, and taste/family preference..

Indicator 4 More Certified Organic/Locally-grown Food



Does your family consume certified organic food regularly/ locally-produced or food from your own garden as available?

If so, what kinds of lower-impact foods does your family choose?

For those foods chosen in 2003, was it more, less or about the same as previous years?

Mill Creek Sustainable Living Survey

Findings

Activity in this indicator is high over all. Most respondents, 92%, consume at least one of these types of lower-impact foods on a "regular basis". A small number of respondents without gardens have joined a community garden or agricultural co-op, and for this reason all 60 respondents are considered eligible.

Consumption of each specific type of food is also high, with most respondents consuming all food types as available. Locally-grown is the most common food type, at 78%. There is little doubt the proximity of the Strathcona Farmers' market plays a role in this.

Seventy-five percent of respondents consume organic food on a regular basis. Sixty-five percent consume food from their own garden or a shared garden, mostly in the summer season.

More in 2003...

This indicator is on the increase among a large majority of respondents (72%). Just over half (57%) of respondents claim they ate more organic food in 2003. Some ascribe this to increased availability of organic food in stores in the Mill Creek area. Half of respondents (50%) consumed more locally grown food.

Barriers

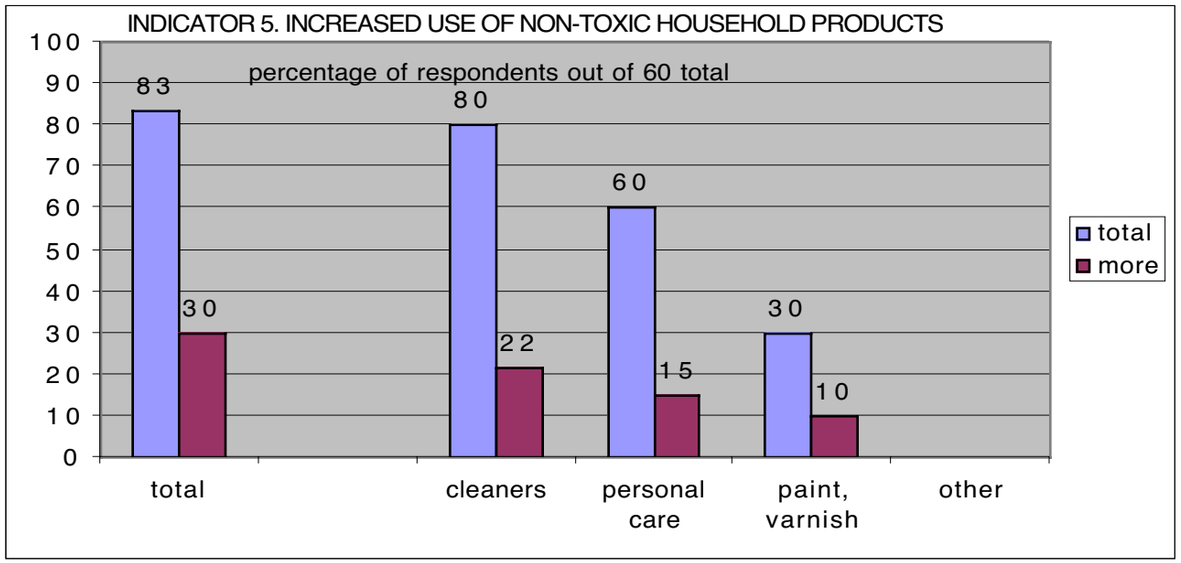
Q. “Has your family ever wanted to eat more of these lower-impact foods, but experienced a barrier?”

Those respondents wanting to consume more organic food are the majority, though many link this with a desire to eat more locally grown as well. Twenty-five of 60 (42%) of respondents would consume more organic food except for the cost (17/25), limited availability (11/25), lack of knowledge about preparing it (3/25) and lack of choice in restaurants (1/25)

Seventeen of 60 respondents (28%) claim they would eat more locally-grown food. By far, the limited availability (14/17) is the biggest barrier. Many people specifically wish the Strathcona Farmers’ Market were open longer and more days of the week. Cost is the second highest barrier (5/17) and lack of availability in restaurants is mentioned once.

Eating more food from one’s own garden is the wish of 7 of 60 respondents. Barriers include lack of space (2/7), lack of time (2/7), and “too much effort” (1/7). Factors such as living in an apartment without a balcony do add limitations that are not universal. Community gardens and CSA’s are options mentioned by only a few respondents.

Indicator 5 ❁ Increased Use of Non-toxic Household Products



Does your family make a point of choosing non-toxic household products?

If so, which type of non-toxic household products do you choose?

For those products chosen in 2003, was it more, less or about the same as previous years?

❁MillCreek Sustainable Living Survey

Findings

Eighty-three percent of respondents choose non-toxic (or less toxic) alternatives to everyday household products.

Most respondents (80%) choose non-toxic cleaners or make their own from "vinegar, baking soda, etc.".

Sixty percent of respondents shop for personal care products they feel are less toxic than other brands widely available in stores. A minority of respondents (30%) choose paints and varnishes described as less toxic than the usual brands.

More in 2003...

Increase in activity in this indicator in 2003 over previous years is not high over all. Thirty percent of respondents claim they chose non-toxic household products more in 2003. The biggest increase is in the area of cleaners, at 22%.

Barriers

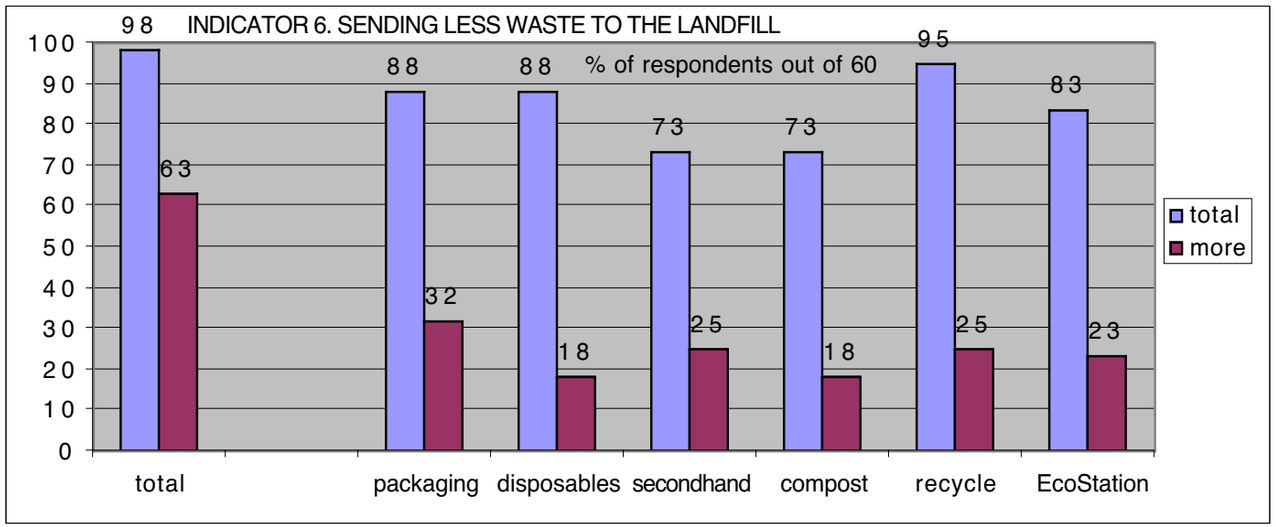
Q. “Has your family ever wanted to choose these lower-impact products, but experienced a barrier?”

Non-toxic cleaners are the product most desired by respondents. Twenty-one of 60 (35%) respondents claim they would purchase more non-toxic cleaners, except for the following barriers: cost (6/21), availability (6/21), and knowledge about which cleaners are less toxic and work well (5/21). Concerns about the effectiveness of non-toxic cleaners and family preferences are closely linked barriers at 6/21 each. Family preference also include, in some instances, those of “the cleaning lady”.

Fourteen of 60 respondents (23%) would choose non-toxic paints and varnishes more often. Availability is the barrier for 5/14; knowledge of which products are less toxic and where to get them is a barrier for 4/14; effectiveness and cost are each barriers for 3/14 respondents.

Fourteen of 60 respondents (23%) would choose non-toxic personal care products more often. Availability at local stores is the most-often sited barrier (7/14), cost is second (6/14), knowledge and effectiveness tied for third (2/14 each) and family preference is sited by one respondent as the barrier.

Indicator 6 Sending Less Waste to the Landfill



Does your family reduce the amount of paper, plastic, toxic, organic and other waste going to the landfill on a weekly basis?

If so, which methods of reducing waste does your family practice?

For those methods practiced in 2003, was it more, less or about the same as previous years?

Mill Creek Sustainable Living Survey

Findings

This indicator has a very high participation rate, at 98%. All 60 respondents except one use at least one method of reducing waste going to the landfill. The methods of waste reduction fall into all three categories: reduce, re-use and recycle.

Recycling, at 95%, has the highest participation rate. One participant praises the multi-family recycling program, new in Edmonton two years ago, as being an "enabler".

Two waste reduction methods, buying products with less packaging and buying fewer disposable products, are second at 88% each. Reported rate of using the Eco-Station for household hazardous waste is high, at 83%. Seventy-three percent of respondents regularly reduce waste by buying second hand and composting.

More in 2003...

Sixty-three percent of respondents increased at least one of these methods in 2003 over previous years. Over all increases in each method are not high. The most improved method is seeking out less packaged, or bulk, items, at 32%.

Barriers

Q. “Has your family ever wanted practice any of these waste-reduction methods, but experienced a barrier?”

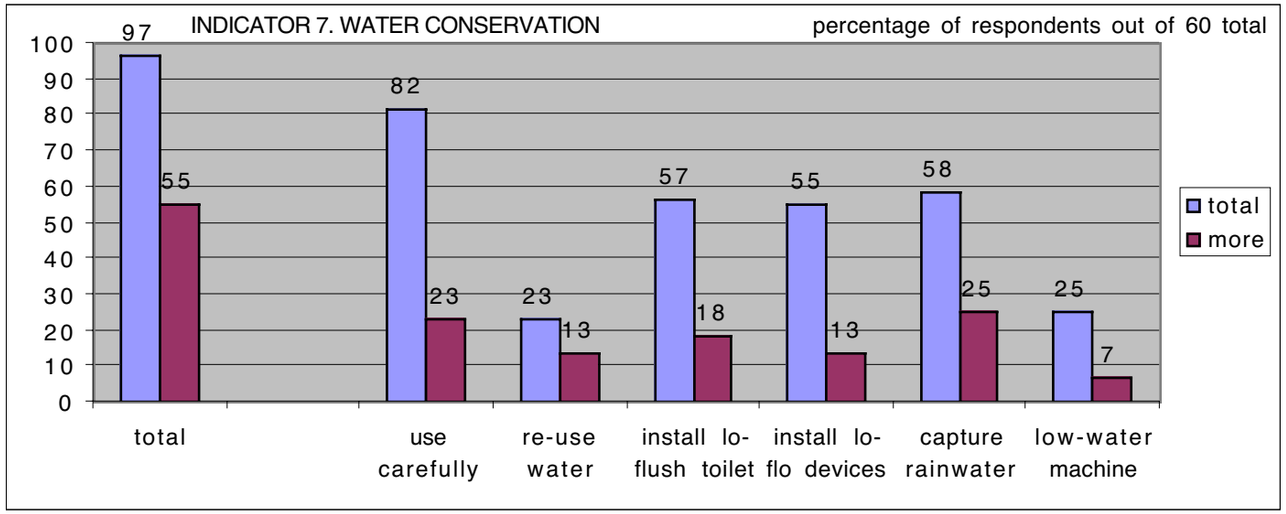
Twelve of 60 respondents (20%) claim they would compost more. Lack of knowledge is the most common barrier (5/12). In this category are placed several respondents who have attempted composting but gave it up due to an infestation of mice (outdoor) and flies (indoor). Due to the availability of worm composting units, all renters are considered eligible, though renting is considered the barrier by 3/12.

Buying products with less packaging is mentioned second most often, with 10/60 or 17% experiencing a barrier to this action. All but one barrier (9/10) can be described as lack of choice of many products with less packaging or in bulk.

Five of 60 respondents (8%) describe a barrier to recycling as much as they would like. Three of 5 say some products aren’t recylable.

Three of 60 respondents (5%) describe a barrier to buying fewer disposable products. For 2/5 this is due to having a baby and needing to use disposable diapers, and for the other one it is due to eating out.

Indicator 7 Water Conservation



Does your family conserve water inside and outside your home?

If so, which water conservation strategies does your family use?

For those strategies used in 2003, was it more, less or about the same as previous years?

Mill Creek Sustainable Living Survey

Findings

This indicator has a very high participation rate, at 97%. All 60 respondents are considered eligible, though 3 of 60 find being a renter is a barrier for some strategies.

Using water carefully is the most widely used strategy, at 82%. This is described in the form of habits: "trying not to run the tap excessively, taking shorter showers, etc.". Capturing rainwater is next, at 58%. Slightly more than half of respondents conserve water by installing or adapting a low-flush toilet (57%) and installing low-flow devices on showerheads and faucets (55%).

Twenty-five percent of respondents use either a water-saving washing machine or dishwasher. Least common strategy is re-using water (23%).

More in 2003...

Overall improvement in this indicator in 2003 over previous years is just above half, at 55%. Around one-fourth of respondents captured more rainwater last year, and slightly less (23%) used water more carefully.

Barriers

Q. "Has your family ever wanted to use any of these water-conservation strategies, but experienced a barrier?"

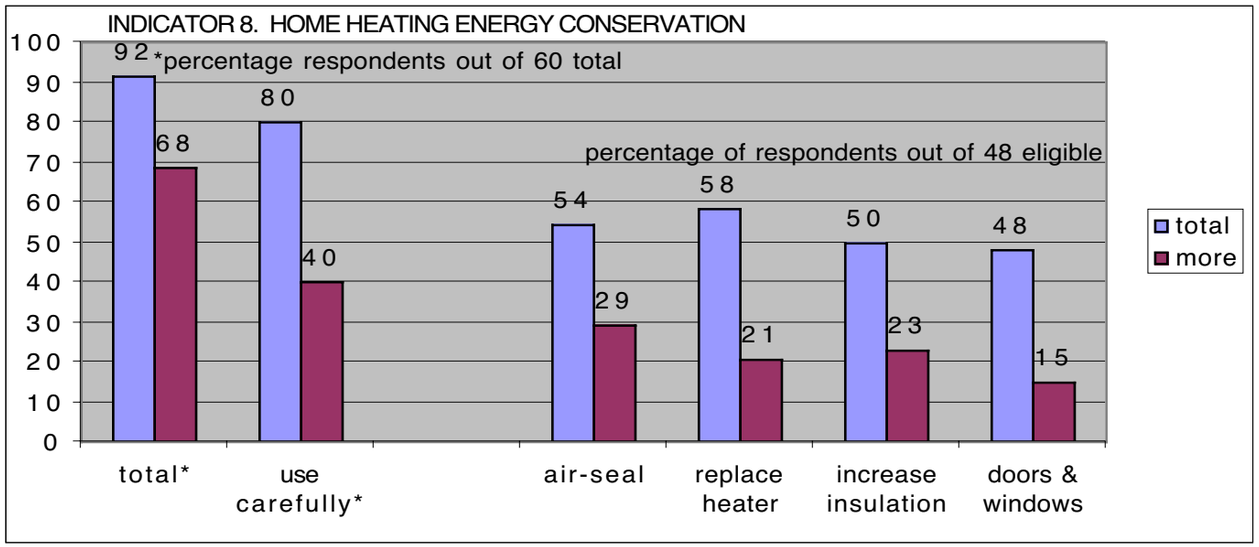
The most desired strategy is capturing rainwater, at 13/60 respondents (22%). Three of 13 respondents are having trouble finding a rainbarrel that suits their needs and is large enough. Other barriers are time (3/13), living in an apartment (2/13), infrastructure (2/13), knowledge (1/13) and cost (1/13).

Using low-flow devices is mentioned by 11/60 respondents (18%). Most frequent barrier to this action is cost (4/11). Fitting existing fixtures, time and knowledge are each at 3/11.

Ten of 60 respondents (17%) claim they would re-use water. The barriers are fairly evenly divided, at 2/10 each, between knowledge, infrastructure, cost and family preference. One respondent says it is illegal in Alberta to use washing machine water to water the lawn.

The desire to use a low-flush toilet, or adapt the existing one is claimed by 9/60 (15%). Barriers are cost (5/9), knowledge (4/9), time (3/9), being a renter (2/9) and family preference (2/9). Lastly, 9/60 or 15% of respondents would use a low-water machine. The most frequent barrier is cost (4/9).

Indicator 8 Home Heating Energy Conservation



Does your family conserve natural gas or other heating fuels at home?

If so, which strategies do you use to conserve heat?

For those heat-conservation strategies used in 2003, was it more, less or about the same previous years?

Mill Creek Sustainable Living Survey

Findings

This indicator is the most problematic to quantify. All respondents who want to "use heat carefully" (described as keeping the thermostat as low as possible) are able to. For this reason, the "total" and the "use carefully" percentages are measured out of 60 total respondents.

The last four strategies involve retrofitting of the abode to some extent. Ten respondents claim that being a renter is a barrier for these strategies. Two respondents say they have purchased a new home so have limited need to retrofit. For these reasons, the last four strategies are measured out of 48 eligible respondents.

92% of 60 total respondents use at least one strategy. Using carefully is the most common overall (80%). The other strategie used by eligible respondents are: replacing a furnace or hot-water heater with a more efficient one (58%), air-sealing (54%) increasing insulation (50%) and upgrading doors and windows (48%).

More in 2003...

Forty percent of total respondents were more conservative with their home heating use in 2003. The largest increase was in the air-sealing strategy, at 29% of eligible respondents.

Barriers

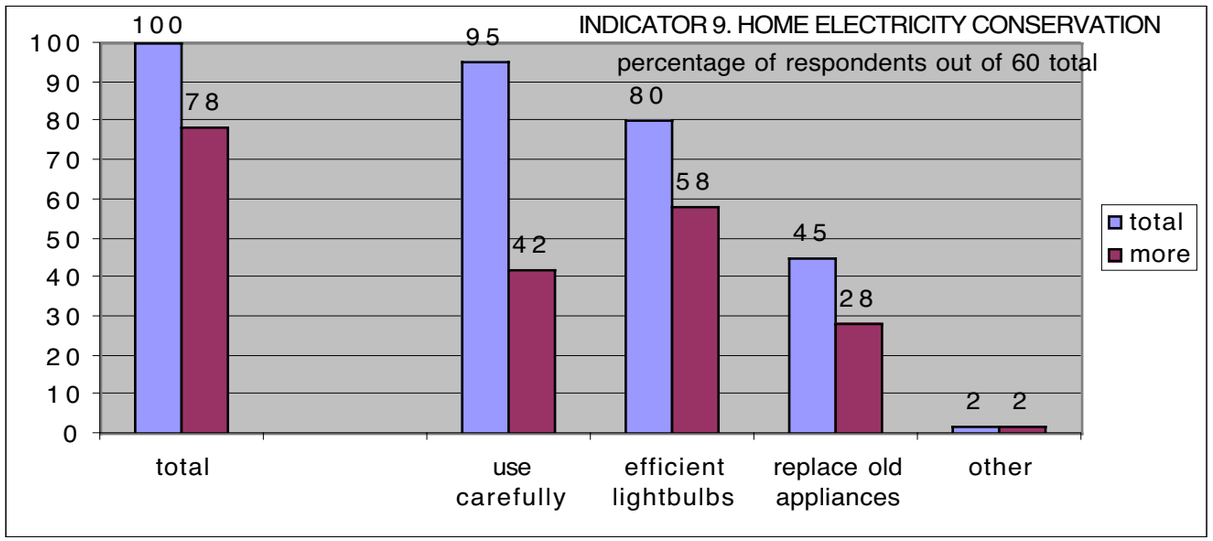
Q. “Has your family ever wanted to use any of these heat-conservation strategies, but experienced a barrier?”

The most desired action expressed by eligible respondents is replacing doors and windows with more energy-efficient ones. Nine of 48 (19%) eligible respondents would do this. The largest barrier by far is cost (8/9). Time is a barrier for one respondent, and another’s is living in an historic home, where they are limited as to changes that can be made.

The next strategy can best be described as a total energy-efficiency retrofit of an existing home (“all strategies”). Six of 48 (13%) eligible respondents state they would do this except for one barrier: cost (6/6). Many respondents mention they have had or are planning an Energuide for Houses evaluation. An equal number of respondents (6/48 or 13%) would replace a furnace or hot-water heater with a more efficient one. Cost is the barrier for 5/6 and time for 1/6.

Three of 48 (6%) eligible respondents claim they would do more air-sealing, except for the following barriers: cost (2/3), knowledge (2/3) and time (1/3).

Indicator 9 Home Electricity Conservation



Does your family take steps to conserve electricity in your home?

If so, which electricity-conservation strategies does your family use?

For those strategies used in 2003, was it more, less or about the same as previous years?

Mill Creek Sustainable Living Survey

Findings

All respondents, 100%, use at least one strategy for conserving electricity.

Using electricity carefully, described as "turning off lights and other appliances when not in use", is the highest reported strategy (95%). Also included in this group are those respondents who find other ways to conserve through daily use of electricity. Some get rid of non-essential appliances; others unplug electrical devices to cut off "phantom" draining of electricity.

Replacement of incandescent lighting with "compact fluorescent or any other more efficient lighting" is reported by 60% of respondents. Forty-five percent of respondents have replaced an older appliance with one they know is more efficient.

More in 2003...

Overall improvement in electricity conservation in 2003 over previous years is high, at 70%. The largest improvement is in the area of efficient lighting, at 58%. Forty-two percent of respondents were "more careful" about conserving through daily use of electricity.

Barriers

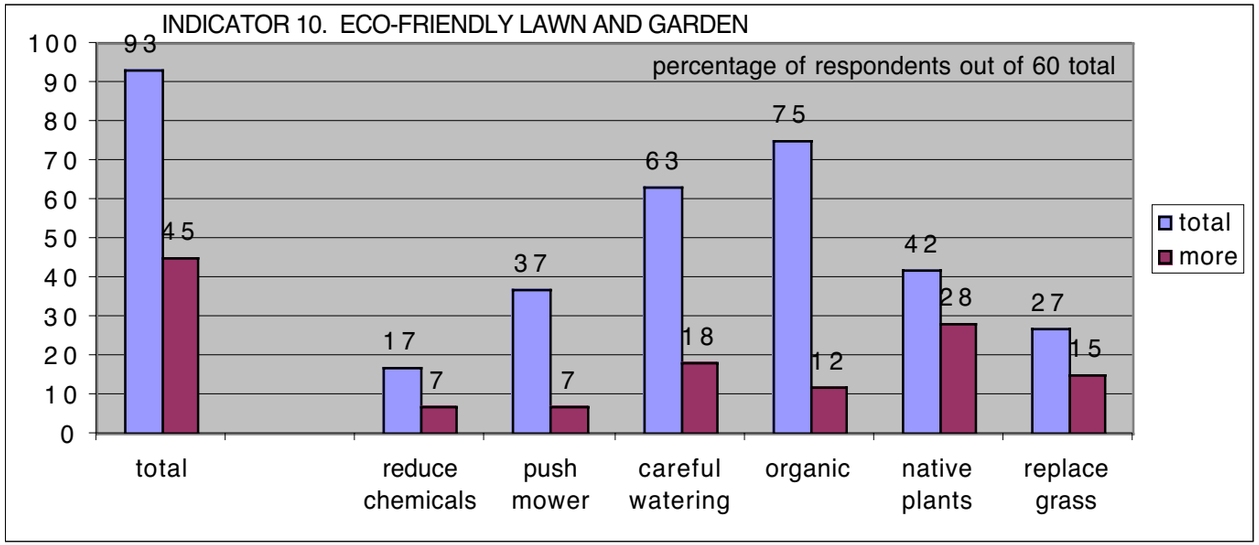
Q. “Has your family ever wanted to use any of these electricity-conservation strategies, but experienced a barrier?”

Replacing an older appliance with a more efficient one is tied with installing efficient lighting, at 10 out of 60 respondents (17%) each. The barriers to replacing an older appliance are cost (9/10), knowledge of which appliances are most energy efficient (2/10) and not being ready to replace the existing appliance (1/10).

Barriers to installing efficient lighting are cost (4/10), dislike of the light quality (3/10), and concerns about the toxicity of CFLs (2/10). Availability and problems matching existing lighting fixtures are each mentioned once.

Five of 60 eligible respondents (8%) say they would like to use electricity more carefully. The most common barrier can best be described as winter (using an electric heater due to the cold, more lights on due to the dark). Family is the barrier for 2 of 10 respondents, children in both cases. One respondent points out that phantom loads from appliances are a barrier to careful use of electricity.

Indicator 10 Eco-friendly Lawn and Garden



Does your family take steps to make your lawn and/or garden more ecologically friendly?

If so, which methods of eco-friendly lawn/ garden care does your family practice?

For those methods chosen in 2003, was it more, less or about the same as previous years?

Mill Creek Sustainable Living Survey

Findings

Activity in this indicator is high, at 93%, even among respondents with a balcony garden. Respondents tend to be excited about new possibilities in this indicator. They also relate stories of interactions with neighbours, making this a dynamic area over all to research.

Going completely organic (explained as no chemical additivies at all) tends to be more favoured, at 75%, than reducing (but not eliminating) chemical use (17%). Careful watering is high, at 63%. There is a wide variety of strategies for this, from timing the watering, to piling snow in strategic areas, to installing irrigation systems. "Benign neglect" does work for some of these methods as well.

Forty-two perecent of respondents seek out plants they know are native to this area. Thirty-seven percent use a push-mower (instead of gas or electric), and 27% have replaced grass with any "lower-impact cover".

More in 2003...

Slightly less than half of respondents increased activity in this indicator. The most significant improvement is the 28% of respondents who planted more native plants in 2003 than previous years.

Barriers

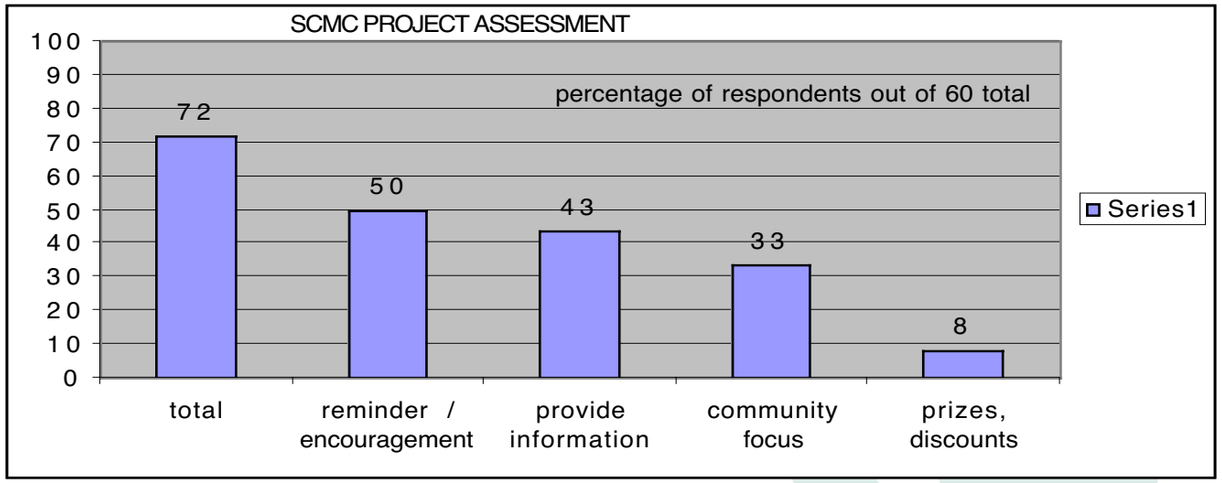
Q. “Has your family ever wanted to practice any of these eco-friendlier methods of lawn & garden care, but experienced a barrier?”

One respondent did feel that being a renter is a barrier to all methods, but then explained she is going to plant a balcony garden in 2004. Due to the availability of this type of garden, and shared gardens, all renters are considered eligible for the indicator, though some methods are not applicable to apartment dwellers.

Many respondents state they would like to practice most or all of these “eco-scaping” methods. In this category are 11 of 60 total respondents (18%). Barriers are cost and time, at 3/10 each, and at 1/10 each: concerns regarding appearance, concerns regarding neighbours, and habit. One respondent states he did a complete eco-scaping of his yard, and his taxes went up!

Ten of 60 (17%) respondents claim they would use a push mower. The barriers are the effort involved (4/10), concerns regarding quality of the cut (3/10), and at one each: cost, disability and time. Eight of 60 (13%) respondents would plant native plants and 5 of 60 (8%) would replace grass with a lower-impact cover of some sort. Barriers to these methods are knowledge, availability, cost and time.

SCMC Project Assessment and Comments



For those actions taken or increased in 2003, did the SCMC project help or inspire in any of these ways?

Forty-three percent of respondents say they received information that enabled them to take or increase an action. The primary venue for delivering information was the Mill Creek Eco-fair. One respondent states, "The Eco-fair helped to start my education on native plants. I want to bring my yard to as natural a state as possible, for beauty and food." Several respondents praise the rainbarrel demonstration as being informative. Two respondents already knew most of the "standard" material, but found the renewable energy display informative.

Almost three-quarters (72%) of respondents say the SCMC helped them add or increase at least one mode or strategy (in 2003) for reducing their total impact on the environment in their day-to-day lives.

Four Important Ways

One-half (50%) of respondents feel the SCMC project provided a reminder or encouragement to begin a new action or increase one they were already doing. For example, one respondent was reminded at the Mill Creek Eco-Fair to take her old compact fluorescent lightbulbs to the Eco-centre. Another says "the initial meeting (in April 2003) provided inspiration to research composting and overcome a barrier I was having". One respondent finds the survey itself informative and a reminder to take action.

About a third of respondents (33%) feel the community focus of the event is inspiring or encouraging. One respondent says it is reassuring to know "you're not the only one in the neighbourhood doing things for the environment". Another respondent was pleasantly surprised to see work colleagues on the email list, "people I never thought would be interested in the environment." One respondent spoke positively of his experience working on a the battery-collection project with two other SCMC participants.

A few respondents (5%) say the prizes, discounts and free gifts were the reason they added or increased an action. Most notable are the respondents who began indoor composting after receiving free worms at the Eco-fair. One respondent says it was good to see which businesses in the area are supportive of environmental sustainability. Many were not aware of these incentives.

SCMC Project Assessment (cont'd)

Criticism

There are a few negative comments about the SCMC, generally attributable to failures in communication from the organizers, Green Communities Edmonton Association. Four respondents feel the emails were too long, wordy or too difficult to understand. Two respondents say there was very little communication. Two respondents critiqued the advertising for the Eco-fair, saying it didn't reach enough "mainstream" people. Two respondents feel they were misled into believing the SCMC was organized to battle the City on environmental problems in the Mill Creek itself, and were therefore disappointed to learn that this is not the focus.

Sustainable Living in General

Many respondents have interesting things to say about sustainable living in general. One respondent shares the need for, "getting rid of time wasters and clutter, and then you have more time to read up and incorporate slower, more sustainable ways of living." Several respondents who are business people relate all the different ways they are reducing the impact of their business on the environment, not necessarily for profit but to provide "personal satisfaction". Two respondents in their eighties did not learn anything new, as they have been waste-reducing experts for decades, but are inspired to learn that many younger people in the community are getting on board. Some respondents encourage us by remarking that the project, and the Mill Creek Eco-fair, is a good start and that building a community sustainability movement takes time.

Detailed Background

This survey was commissioned by Green Communities Edmonton Association (GCEA), an Edmonton-based, not-for-profit environmental organization, to meet some of the information goals of a pilot project they have been conducting in the Mill Creek communities from February 2003 through December 2003. The Sustainable Communities for Mill Creek Project (SCMC) is designed around Community Based Social Marketing (CBSM) Principles.

> Community-based social marketing is based upon research in the social sciences that demonstrates that behavior change is most effectively achieved through initiatives delivered at the community level which focus on removing barriers to an activity while simultaneously enhancing the activities' benefits.
> (extracted from http://www.cbsm.com/)

The goal of the SCMC project is to test the effectiveness of CBSM principles on encouraging the residents of a community to reduce their impact on the environment in up to ten areas of their lives. One-hundred and fifty (150) residents of seven Mill Creek Communities were recruited as participants. These participants agreed to fill out a survey(s), as well as participate in other activities designed to encourage and enable them to increase ten indicators of sustainability in their lives. (For more information about the SCMC, http:www.greencommunitiesedmonton.org)

As the SCMC unfolded, Green Communities Edmonton and the other project stakeholders decided to conduct two surveys: the Preliminary Survey (see below), and an evaluation survey at the end of the project. The evaluation survey expanded to become the Mill Creek Sustainable Living Survey because of the addition of two information objectives to the original two (evaluation) objectives.

Detailed Information Objectives

There are four information objectives in total.We wanted to find out:

1. What sustainable activities have residents improved upon over the past year (in 2003) since the SCMC started?
1.a. What sustainable activities do residents plan to add over the course of this year (2004).

2. What was the influence of the SCMC in these improvements? General comments on any influences? Suggestions for the future?

The first two information objectives are for evaluating the success of the Sustainable Communities for Mill Creek (SCMC) project with increasing indicators of sustainability within the lives of its participants.We want to know

3. What sustainable activities are people most engaged in in the Mill Creek Communities?

The third information objective was added by Barb Allard, survey designer. Early testing revealed that it is awkward to ask people to list only those activities they have increased, without allowing them to summarize all their activities. People are proud of all the actions they are taking to make their lives more sustainable, but they also tend to relay the pertinent information embedded in little stories about their lives as a whole. Barb found it was more valid to record all behaviours, then ask which were increased in 2003 (over the course of the SCMC). This was also an attempt to address the problem of not having a baseline against which to measure improvements in 2003 over previous years.

Detailed Information Objectives (cont'd)

4. What sustainable activities would people like to start/improve. What are the barriers to these improvements? How could future community outreach help them overcome these barriers?

One of the first steps of any Community-based Social Marketing project is "identifying barriers and benefits to an activity". The goal of the Preliminary Survey (back in April 2003) was to find out what the **environmental concerns** of the Mill Creek participants are, which concerns they are **interested in taking action** on, and what are the **barriers to taking action** they are experiencing. Data from this survey was used to design the Mill Creek Eco-fair and other project initiatives. There were delays in writing the Preliminary Survey, and as a result only 33 participants filled it out, those who came to an orientation meeting on April 16, and it was never sent out to the wider participant group.

In December 2003, one of the project stakeholders, Jill Kirker of Alberta Eco-trust, communicated to GCEA that she felt the information on "barriers to action in the Mill Creek area" could be fruitful and requested we use the Evaluation Survey to try to get some more of that information. So the fourth information objective was added.

Ultimately, the SCMC Evaluation Survey emerged as something much larger than its initial intent. For this reason, it has been dubbed the Mill Creek Sustainable Living Survey (MCLS).

Detailed Methodology and Limitations

The Mill Creek Sustainable Living (telephone) Survey was designed, implemented and analyzed over three months, January through March 2004, by Barb Allard.

Developing the Questionnaire

In January, Barb began with the "Mill Creek Preliminary Survey" , the ten-step programs, and the unfolding information objectives, and began designing various templates. It was decided to design the questionnaire to be filled out directly on an Excel:Mac spreadsheet. Because there was no money or time allotted for the design of the survey, Barb allowed herself only two weeks to come up with a workable format, testing out variations on 12 non-participant volunteers. After approval of the survey design by Richard Merry, Barb began surveying participants in late January and continued through to the end of February, on a part-time basis.

The questionnaire is composed of ten multi-part, "indicator" questions, ten two-part "barrier" questions, ten one-part "plans for 2004" questions, one multiple choice "how did we help" question and "room for comments" at the end.

The "indicator" questions are in three parts and gather quantitative data: 1. Does your household reduce your impact on the environment in this general way? 2. If so, which alternative modes or which strategies do you use? 3. For those modes or strategies used in 2003, was it done more, less or about the same as previous years.

The barrier questions are qualitative in nature and short answer: 1. Has your family or household ever wanted to use any of these alternative modes or strategies, but experienced a barrier (please name the alternative mode or strategy)? 2. If so, what was/is the barrier? The "plans for 2004" are short answer, "Does your family or household have plans to add or increase any of these alternative modes or strategies in 2004? Please name the alternative mode or strategy."

Detailed Methodology and Limitations (cont'd)

The "how did we help" question is multiple choice, quantitative, and the respondent could pick as many possible ways as appropriate. "For those actions added or increased in 2003, was the SCMC helpful in any way? I have four possible ways we may have helped (multiple choice) and also room for your comments at the end." Quotes and summaries were transcribed. These were read out to the respondent afterward to verify, "Does that sound about right?"

Questionnaire Design Problems

Reliability: because there was so little time to develop the questionnaire properly, small additions and changes continued as the survey was being delivered, right up until respondent #53. This includes the wording of the questions, the order of the questions, and the wording of the introductory script.

Validity: the survey measures behaviours, not hard data. There was never a fixed agreement between Barb and the respondents as to what constitutes, for example, "regular use" of an alternative mode or strategy. Barb explained to each respondent that a barrier "is not a complaint; it is something identifiable that is keeping you from either adding or increasing a particular mode or strategy". There is a possibility that some respondents may have remained confused about this.

Choosing the Respondents

The respondents are 60 of 150 participants in the Sustainable Communities for Mill Creek Project. They are individuals with a prior interest in sustainable living, residing in an area of Edmonton which is among the most amenable to taking action on sustainability in one's day to day life. They were sourced from phone lists that GCEA accumulated as people signed on at various stages of the SCMC project. For a more detailed profile of these participants, see appendix iii.

Respondent Limitations

Our respondents are a non-probability sample of the general Mill Creek population. It is important to note these respondents had made a prior agreement to answer a survey, and by virtue of having volunteered to sign onto a year-long project, it should be assumed they possess a prior interest in sustainable living. This positive attitude toward the subject matter tends to bias respondents on the side of positive answers to most questions.

Our respondents are a non-probability sample of the entire SCMC participant population. Most of the first half (33 in total) were contacted from one specific list, the Mill Creek Eco-fair Pledge Sheets (There was a secondary purpose for contacting these first. After the survey, Barb spent an extra few minutes with these respondents to follow up on the pledges they made at the Mill Creek Eco-fair back in June. The Pledge Program is another SCMC initiative and does not relate to this MCSLS report in any other way.) The rest of the respondents (27) were contacted fairly randomly from the other lists.

The results of the MCSLS could potentially be representative of those individuals with a prior interest in sustainable living within the Mill Creek communities. This would best be decided by a person with expertise in statistics. The Mill Creek Communities are unique in many ways. These results are probably not representative of the rest of Edmonton, even those residents in other parts of the city with a prior interest in sustainable living.

Collecting the Data

Sixty respondents completed the phone survey. Their answers were entered directly onto the Excel:mac spreadsheet. Positive answers to quantitative questions were marked in the appropriate columns with a #1. The entire list of alternate modes or

Detailed Methodology and Limitations (cont'd)

strategies was often read out to prompt the respondent, but otherwise people tended to be comfortable and well-versed in the material.

Qualitative data was summarized and transcribed as short phrases.

Each survey took an average of 51 minutes, including line up (calling, leaving messages, making an appointment) and delivery. Because the respondents had made a prior agreement to do the survey, there was a very low refusal rate among those respondents reached by phone (only one). It is difficult to ascertain how many respondents were unwilling to do the survey so just didn't call Barb back.

Problems with Collecting the Data

The questionnaire is very long and goes back and forth from quantitative (yes and no) to qualitative(short answer). It was designed to be completed in 20 minutes, but many respondents were very forthcoming with lots of information (stories from their lives, details about barriers encountered, philosophy about sustainable living, etc.). The average time per questionnaire was 34:30 minutes, with some taking 45 minutes or an hour. Total average time per survey completed was 51:00 minutes.

The amount and quality of informaton given by our respondents was impressive. The length of time taken per survey (51:00 minutes) is not unusual, but it became a problem because there was insufficient funding and time allotted for the desired 100 surveys. Surveying, therefore, had to be abandoned after #60 respondent.

Reporting on Data

The quantitative data for the ten "indicator" questions and the one "how did we help" question was compiled by adding up all the #1's in each column. For this report, the data was translated to percentages of eligible respondants. On the "indicator" bar graphs, the data for each alternative mode or strategy is illustrated as: 1. percentage of eligible respondents using it, and 2. those respondents having increased it in 2003 over previous years. The percentage of eligible respondents involved in the indicator in general is also displayed this way. (Some of this data was derived afterward by totaling up all the respondents who claimed to be using any alternative modes or strategies more in 2003.)

The short-answer "barrier" questions were transferred to ten separate spreadsheets for analysis. Alternative modes or strategies, desired but not possible due to a barrier, are reported by the number of times each was mentioned and also by percentage of total eligible respondents. The barriers were categorized and counted by frequency. These aggregate barriers are reported by the number of times each is mentioned as the barrier to each alternative mode or strategy. The "how did we help" quantitative data and the long-answer "room for your comments" data was summarized into a one-page report (see project comments).

Problems with Reporting on Data

The "plans for 2004" data has not been analyzed yet due to budget and time constraints.

Indicator #8, "Home Heating Energy Conservation" was difficult to quantify because most of the home-heating energy conservation strategies involve altering the infrastructure of the home in a some way. Being a renter, living in an apartment, and living in a newer home are all conditions which disqualify some respondents for most of the strategies. Because there is no reliable demographic information to go with this indicator, the results are probably not that useful. This is one indicator in particular where more in-depth questioning is required.

Mill Creek Sustainable Living Survey

appendix i : Questionnaire

Indicator 1. Reduced the Use of Private Automobile
a) Does your family limit the amount of single-person auto trips made on a weekly basis?
yes no yes and no
b)If so, which lower-impact modes of transportation do you use?
walk bike public transit car-pool trip-plan other
c)For each mode chosen in 2003, were you doing it more, less or about the same as previous years?
d) Has your family ever wanted to use any of these lower-impact modes of transportation, but experienced a barrier? If so, describe the difficulty or barrier/
e) Does your family have plans to use more of these lower-impact modes of transportation on a weekly basis in 2004? If so, give details.

Indicator 2. Improved Vehicle Efficiency
a) Does your family take steps to reduce the emissions from your vehicle?
yes no yes and no
b) If so, which strategies for reducing vehicle emissions do you use?
cleaner fuel regular tuneup driving habits efficient vehicle
other
c) For those strategies used in 2003, was it more, less or about the same as previous years?
d) Has your family ever wanted to use any of these emissions-reducing strategies, but experienced a barrier? If so, describe the difficulty or barrier/
e) Does your family have plans to increase any of these emissions-reducing strategies in 2004? If so, give details.

Indicator 3. Consume Less High-impact Foods (Meat & Seafood)
a) Does your family limit consumption of meat or seafood on a weekly basis?
yes no yes and no
b) If so, how would you describe the lower-impact meals your family chooses?
less meat less seafood vegetarian meals vegan meals
c) For those meals consumed in 2003, was it more, less or about the same as previous years?
d) Has your family ever wanted to eat more of these lower-impact meals, but experienced a barrier? If so, describe the difficulty or barrier/
e) Does your family have plans to eat more of these lower-impact meals in 2004? If so, give details.

Indicator 4. More Certified Organic/Locally-produced Food
a) Does your family consume certified organic food regularly/locally produced or food from your own garden as available?
yes no yes and no
b) If so, what kinds of lower-impact foods does your family choose?
organic locally grown own garden other
c) For those foods chosen in 2003, was it more, less or about the same as previous years?
d) Has your family ever wanted to eat more of these lower-impact foods, but experienced a barrier? If so, describe the difficulty or barrier/
e) Does your family have plans to eat more of these lower-impact foods in 2004? If so, give details.

Indicator 5. Increased Use of Non-toxic Household Products
a) Does your family make a point of choosing non-toxic household products?
yes no yes and no
b) If so, which type of non-toxic household products do you choose?
cleaners personal care paint, varnish other
c) For those products chosen in 2003, was it more, less or about the same as previous years?
d) Has your family ever wanted to choose these lower-impact products, but experienced a barrier? If so, describe the difficulty or barrier/
e) Does your family have plans to choose more non-toxic products in 2004? If so, give details.

Indicator 6. Sending Less Waste to the Landfill
a) Does your family reduce the amount of paper, plastic, toxic, organic and other waste going to the landfill on a weekly basis?
yes no yes and no
b) If so, which methods of reducing waste does your family practice?
buy less-packaging buy less disposables re-use/second-hand
compost recycle use the Eco-station
c) For those methods of waste reduction practiced in 2003, was it more, less or about the same as previous years?
d) Has your family ever wanted to practice any of these waste-reduction methods, but experienced a barrier? If so, describe the difficulty or barrier/
e) Does your family plan to practice more of these waste-reduction methods in 2004? If so, give details.

appendix i : Questionnaire (cont'd)

Indicator 7. Water Conservation
a) Does your family conserve water inside and outside your home?
yes no yes and no
b) If so, which water conservation strategies does your family use?
use carefully re-use water install lo-flush toilet install lo-flow devices capture rainwater low-water machine
c) For those strategies used in 2003, was it more, less or about the same as previous years?
d) Has your family ever wanted to use any of these water-conservation strategies, but experienced a barrier? If so, describe the difficulty or barrier/
e) Does your family have plans to use more water-conservation strategies in 2004? If so, give details.

Indicator 8. Home Heating Energy Conservation
a) Does your family conserve natural gas or other heating fuels at home?
yes no yes and no
b) If so, which strategies do you use to conserve heat?
use carefully air-seal replace furnace/hwh increase insulation doors and windows
c) For those heat-conservation strategies used in 2003, was it more, less or about the same as previous years?
d) Has your family ever wanted to use any of these heat-conservation strategies, but experienced a barrier? If so, describe the difficulty or barrier/
e) Does your family have plans to use more heat-conservation strategies in 2004? If so, give details.

Indicator 9. Home Electricity Conservation
a) Does your family take steps to conserve electricity in your home?
yes no yes and no
b) If so, which electricity-conservation strategies does your family use?
use carefully efficient lightbulbs replace old appliances
other
c) For those strategies used in 2003, was it more, less or about the same as previous years?
d) Has your family ever wanted to use any of these heat-conservation strategies, but experienced a barrier? If so, describe the difficulty or barrier/
e) Does your family have plans to use more heat-conservation strategies in 2004? If so, give details.

Indicator 10. Eco-friendly Lawn and Garden
a) Does your family take steps to make your lawn and/or garden more ecologically friendly?
yes no yes and no
b) If so, which methods of eco-friendly lawn/garden care does your family practice?
reduce pest/herbicide push mower careful watering organic lawn & garden native plants replace grass
c) For those methods chosen in 2003, was it more, less or about the same as previous years?
d) Has your family ever wanted to practice any of these eco-friendlier methods of lawn & garden care, but experienced a barrier? If so, describe the difficulty or barrier/
e) Does your family have plans to practice more eco-friendly lawn & garden methods in 2004? If so, give details.

SCMC Project Assessment
a) For those actions taken or increased in 2003, did the SCMC project help or inspire in any way? ("I have four possible ways here, then room for your comments.")
reminder/encouragement providing information community focus prizes and discounts
b) Please add any additional comments about this project and/or sustainable living in general.

appendix ii : Introductory Script

This survey covers ten indicators of sustainability: that is the ways and means by which individuals, families and households are reducing their impact on the environment in their day-to-day lives. There are ten indicators to cover, so we shouldn't spend more than two minutes on each one if we want to keep the time down to about 20-30 minutes.

The survey goes like this: For each indicator, I am going to ask you whether the members of your household choose to reduce your impact on the environment in this particular way. If the answer is yes, I'm going to ask you which specific, lower-impact actions you choose to take, and whether, last year in 2003, you were doing them more, less or about the same as previous years. (This allows us to identify the trends in your community, and also ask at the end of the survey whether the Sustainable Communities project is having an impact.)

Another goal of the survey is to find out which barriers to action exist in your community. For each indicator, I'm going to ask you whether you have ever come across a barrier to taking any of the actions mentioned. A barrier is not a complaint; it is something identifiable that is keeping you from either adding an action you want to do or increasing one you are already doing. In the interests of time, please keep your answers to these questions down to a few words.

Finally, for each indicator, I'm going to ask if your household has plans to add or increase any new actions in 2004, over the course of the next year. This question only needs to be answered if there is an action that you are definitely planning to add or increase significantly, not just a wish or an idea. Again, please keep your answers brief.

After the ten indicators, I then have a few questions about the project, as mentioned. Then we're done.

appendix iii : About the Respondents

About The Mill Creek Participants – The Universe

The south-eastern Mill Creek communities are near the University of Alberta, with a high population of university staff and students. The western part contains Edmonton's "french quarter", the College St. Jean, and many Francophone residents and businesses. There are many amenities in the area which could help to make sustainable living easier. The famous Strathcona Farmers' Market is nearby, as well as many organic, environmental and health food stores. Many of these retailers are activist entrepreneurs, who promote environmental issues in their stores. There are many gathering places in the Mill Creek area, where people get together to discuss social justice and environmental issues and engage in activist projects. Being an older part of the city, there is reasonably good access to main public transit routes and the river valley cycling trail network. The Mill Creek itself mirrors the lifestyle and attitudes of people living nearby. It is an urban natural area, much loved and well-used for recreation and appreciation of nature. There are a number of active citizens groups in the area fighting to protect the creek valley from overdevelopment.

The one challenge with regard to some sustainability issues relates to the age of most of the houses. The Mill Creek neighbourhoods are in an older part of the city, making electricity, heating and water conservation challenging. This is one area where demographic information would be helpful.

Green Communities Edmonton Association chose the Mill Creek communities to engage this ambitious pilot project in order to maximize the chances of finding enough sympathetic individuals to sign on. The Mill Creek participants, it is assumed, represent those Edmonton residents most likely to be aware of environmental issues, knowledgeable about solutions, and engaged in sustainable living practices. Participants were recruited in a number of ways. They called in after hearing about the project on the news, they were recruited by GCEA employees at various locations, they were recruited by GCEA employees canvassing door to door.

The results of the MCSLS could potentially be expanded to represent those individuals with a prior interest in sustainable living within the entire Mill Creek communities. This would be best decided by a person with expertise in statistics. The Mill Creek Communities are quite unique in many ways because of the infrastructure, services and geographical location. These results are probably not representative of Edmonton, even residents in other parts of the city with a prior interest in sustainable living. It is likely that many large urban centres in Canada would have their own "Mill Creek communities", and perhaps these results could be generalized there. This would require more study.

For political representation in the Mill Creek communities see
provincial: http://collections.ic.gc.ca/abpolitics/database/maps_choice.asp?Year=2001&Constit=Edmonton

federal: http://atlas.gc.ca/site/english/maps/reference/elections/election2000?map=%2Fhome%2Fmapdata%2Faoc_v3%2Fenglish%2Felections2000.map&imgext=-1272420.017417+611305.742125+-1121431210063+745361225291&mode=browse&scale=50000000000000&imgxy=&mapext=&imgx=225&imgy=211

municipal: http://www.gov.edmonton.ab.ca/portal/server.pt/gateway/PTARGS_0_2_264_210_0_43/http://CMSServer/COEWeb/city+government/mayor+and+city+council/city+councillors/ - and click on Ward 4 Councillors