

Facilitator's Summary
PUBLIC INFORMATION FORUM ON
CBSES
(COMPREHENSIVE BROADER SCALE ENVIRONMENTAL STUDY)



January 25, 2007

Brampton Fair Grounds,
12942 Heart Lake Road

 **Ogilvie, Ogilvie & Company**
a division of mobil-izers limited
THE INDEPENDENT PUBLIC FACILITATOR

Facilitator's Overview

My name is Robb Ogilvie and I will be your facilitator and discussion leader for tonight's Public Information session on the Comprehensive Broader Scale Environmental Study or in other words CBSES.

Please accept our apologies for the location. Arrangements are being made now by Todd for next session to be closer.

Our company provides a summary for tonight. All of you who register will get a copy of the summary. If you see any errors or omissions in the summary, call me, let me know and we will make the changes and re-issue it. It is vital that the summary accurately reflect the comments and the discussion.

My role is to make sure the process and events like this are fair, transparent, balanced and informed. Our toll free number 1-866-386-6225. It is a 24/7 number if you call during business hours you get one of us if you call after hours you get an answering service and they e-mail us and one of us will get back to you the next business day.

I would like to introduce the people that are doing the work. We want you to get on a first name basis with them and be comfortable working with them.

The first one is Todd Salter
Credit Valley Conservation, Hazel Breton
Region of Peel – Simone Banz
JDCL – Greg Sweetnam
MHBC The Planning Consultants - James Parkin
Conestoga Rover and Associates – Richard Murphy, one of the main presenters tonight.
Ecoplans Limited – Anne McMillan
LGL Limited – Ken Glassbergin

They are the people doing the technical work and the regulators. We will refer to them by their first name but I wanted you to know who they are. They are not impersonal or invisible faces. I also want to introduce the Coalition of Concerned Citizens because I would like to thank them very much for two things.

One is, they have been consulted regarding the forum timing and arrangements and support the holding of this information forum. Helped us design and plan it and the other thing that I really want to thank you for is apparently you have been instrumental in facilitating permission for access from the Study Area landowners and this is very critical and I wanted to thank you for that as well.

So, we have the President Penny Richardson and one of the Directors, Lorraine Simms. Eddie Long and Bob Gardiner.

The purpose of tonight. The agencies, which is the Town of Caledon, The Region of Peel and Credit Valley Conservation and James Dick Construction have agreed to collaborate on the public consultation process regarding the Comprehensive, Broader Scale Environmental Study. (CBSES) and tonight they are going to provide an update on their findings on Part A for your review and comment so here is the point. The purpose is for them to explain and for you to provide your comments, suggestions and reactions to their presentation. I don't want anyone leaving here tonight with a question still in their mind that they didn't get an answer to. So the point of tonight is to ask those questions.

The elements of this collaborative process is we have tonight's public information session and then there will be a workshop on February 27th to get input on the objectives for the plan and we need to find out tonight how many of you want to come and I hope a lot of you want to participate in it. A special web page is being created on the Town's website where you will be able to get the latest information on the project every week all the way through so check in with the website and you will know what is going on and paper copies of all the reports are available for viewing at the Town offices and tonight if you let us know we will also send you a CD.

The draft, Part A CBSES report contains a ton of data on the Study Area and what the consultants are trying to do is figure out how the ecosystem of the Study Area works and that is what they are going to be talking about tonight. They are not going to be talking about roads, dust..okay? It is how does the ecosystem work. What do we have to make sure does not get damaged or permanently impaired and how does one keep that into consideration in the future, so I have asked them to give you the highlights and provide you with an opportunity tonight and to give you the full package it would take more time than you probably have patience to sit through so it is going to be highlights and then once we are finished with the Q & A period we will be back at the Boards to you will get a chance to have some individual questions again. You can also send them e-mails, letters or call them after tonight with follow-up questions. All of those get recorded, sent to us to include in the summary as well.

So, tonight is to set the stage for Feb. 27th and we are hoping that most of you will come to the 27th, when I say most, meaning it is too

much for me to hope 100% of you will but as many of you who are interested, I would absolutely love it if you would join us on the 27th. We are going to provide some more detail on how it works and we are going to get into rolling up your sleeves and helping us develop a set of objectives which is what you want to see happen there and the detailed discussions on what I call your hopes and aspirations for the Study Area. Todd Salter will speak to us in a little more detail about this shortly.

So, tonight begins what I hope will be an accumulative process. Some information Feb. 27th adds another layer or detail as we work our way through.

There are no stupid questions tonight. My Father used to say to me there are only stupid people that didn't ask the question when they should have which is usually when I didn't want to admit I didn't know something so I would go ahead and screw up. Don't worry. The issue is if you don't understand something please ask the question or if you think someone else doesn't understand something, please ask the question on their behalf.

The other thing is we scheduled to 8:30 and then we have a session backed. We are prepared to stay here as long as there are people at the microphone tonight. So please don't feel that we are truncating and you only have that amount of time. We are only guessing and we'll stay as long as you've got questions, comments, or observations.

One of my tests of meaningful consultation is at the end of tonight, did this give you the information you wanted in order for you to make an informed decision. If it hasn't I need you to tell us. For those who want to be part of this, when you signed in tonight you would have been given a facilitator's feedback form and on the bottom of it is a box that says "do you want to join us on Feb. 27th" yes or no and do you want a copy of the CD, yes or no". The form looks like this. All you have to do is fill this in and make sure you put it in the box behind me tonight me before you leave.

You were also given a workshop guide for tonight and it is this light green document. That is a map of how we are going to go through tonight and there is a copy of the project chronology on the back page.

Tonight's agenda is two presentations and then we will get into questions, answers, discussions and comments and at 8:30 to 9:00 the follow-up open house but if you still have questions, we will stay here until you get them answered.

I need your permission to use five ground rules for our discussion tonight. You have the right to ask any question and you deserve a straightforward answer. My role is to make sure you get an answer but it doesn't mean that you will like the answer, but I will make sure you get an answer. Second is when enough if enough, I would like your permission to allow someone to ask a question, get it answered, have a follow up and get that answered and then move on. You know how some people rag the puck, they keep going? I'll let them do it twice, when they do it the third time I need your permission to say "we have covered that, please let us move on to the next speaker or whomever wants to ask the next question. Third one is, when a question is asked, give the other person time to answer the question. Let's do a question, get an answer, question – answer. Number 4, if you are frustrated with a comment or answer or lack of an answer or it's not clear enough, tell me and I'll try to help. The final one is please ask questions, and to the presenters, respond in a simple, clear and straightforward manner. There is no need for long preambles.

When we were doing some of the pre-budget consultations two years ago, we had so many people in the room; I said, "here is how we have to do it". Ask your question beginning with a noun, a verb and an object just to get through the volume, so keep them short.

Can I have your permission to use these ground rules? What do you think?

Two-paper assistance; "I didn't get a chance to say". When you registered tonight you would have been given this form it looks like this. Anything that you write on that piece of paper and you hand in to me goes in the summary and if you ask a question, I will work with the staff to get an answer that will also appear in the summary. So, use it as a tool. If you didn't have time to go to the microphone you can still put the question of this form and we religiously get them answered.

The second one is the Facilitator's Feedback Form. It is the bottom section of that form that we need you to fill in. You see this box – there is a box here – if you can put those forms in tonight for me I would really appreciate it.

We can now move onto the presentations and the first person that I would like to introduce is Todd Salter from the Town of Caledon and Todd will be speaking on behalf of the Town, Peel Region and the Conservation Authority on the background and how we got here from there.

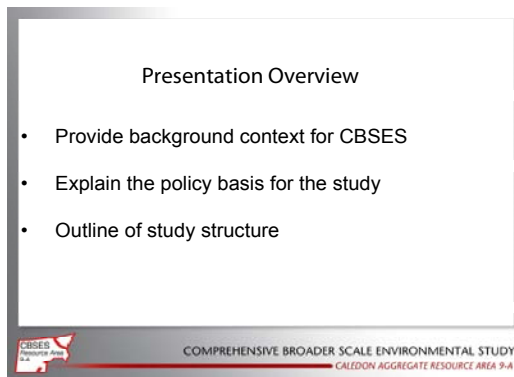
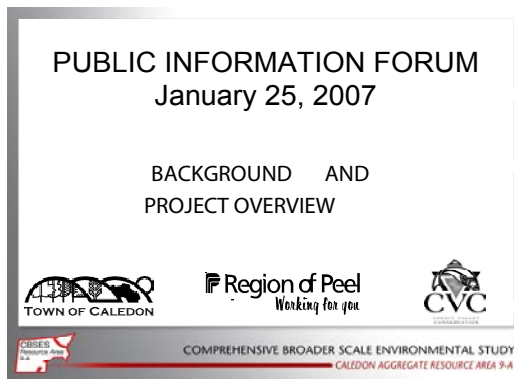
The tall gentleman behind me who has the camera is a professional photographer who works for us and what he does at sessions like this is I ask him to create a photographic story and we take those photographs and we put them in the summaries. I was hoping you would let Peter take photographs tonight but if you object, I will say "Peter, thank you very much, go home and see your wife earlier than you were planning". Does anyone have violent objections to us doing these kinds of group photos and shots for the summary? Thank you. ■

SESSION 2 Todd Salter's Presentation

Welcome everybody. As Robb mentioned I am introducing the presentations tonight speaking on behalf of the Town of Caledon, the Region of Peel and Credit Valley Conservation and what I will be speaking to you about is some background information on the project and a project overview. Now my presentation is about twenty minutes and I can only provide a very high level overview of the process to date because it has been really a very lengthy process going back to the beginning in 1996, so we will be going fairly quickly but if you have any questions about the process please jot them down and ask me during the Q & A session and I can elaborate on that. I will be covering off three things tonight. First of all I will be providing you with a background context of the CBSES. Secondly I will be explaining the policy basis for the study and thirdly I will be outlining the study structure.


So to begin with the background context, there are really two streams to the background that I want to talk about. One is the policy context of the study and the other is the timeline for the Rockfort Quarry application and although tonight is about the CBSES the broader scale study is being done, there is a broader relationship to the Rockfort Quarry that I want to explain tonight. I would like you to go away with an understanding of how this broader scale study relates to that application.

So really that starting point for the policy process was in 1996 with the adoption of the Region of Peel Official Plan. The reason that was the starting point was that official plan set out a process called the Caledon Community Resource Study or CCRS for short and what that Caledon Community Resource Study was all about was the Town of Caledon and the Region of Peel working jointly on developing detailed, local aggregate resource management policies for the Town




**Background Context:
Policy Development**

- Adoption of the Region of Peel Official Plan in 1996: sets out direction for "Caledon Community Resource Study" (CCRS)
- 1996-2000: Town and Region carry out CCRS and develop detailed local aggregate resource management policies
- March 2000: Town adopts Official Plan Amendment 161 (OPA 161)
- May 2003: All objections to OPA 161 resolved, Ontario Municipal Board (OMB) approves amendment


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**Background Context:
Rockfort Quarry Application**

- 1998 – James Dick Construction Limited (JDCL) applies for Rockfort Quarry
- Various appeals received, application referred to OMB in 2000
- November 2003 - OMB rules that the policies of OPA 161 apply to the Rockfort Quarry application
- OPA 161 establishes policies for CBSES

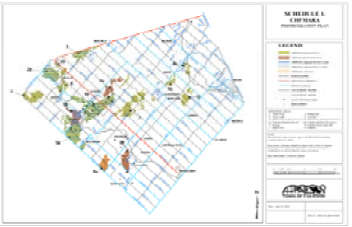

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Policy Basis for CBSES

- OPA 161 identifies "Caledon High Potential Mineral Aggregate Resource Areas" (CHPMARA)
- CHPMARA broken out into two categories "Resource Lands" and "Reserve Lands"
- Rockfort Quarry application located in CHPMARA Area 9-A
- Status of Area 9-A deferred


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Policy Basis for CBSES





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of Caledon. That was a four-year process and that was very open to the public. There was a Community Advisory Group that was participating all the way through. Many of you may have been involved in that exercise and that culminated with the development of a local official plan amendment called Official Plan Amendment 161 and that was adopted by the Town of Caledon in March of 2000 and that established new aggregate resource management for the Town of Caledon. There were a number of objections to that amendment and that delayed its full approval for a period of time, however, in May of 2003 all of the objections to OPA 161 were resolved through settlement discussions that involved all of the parties and that settlement was submitted to the Ontario Municipal Board and they approved OPA 161 and that occurred in May of 2003. So, to talk about the other parallel screen, the Rockfort Quarry Application while this policy work was going on and the CCRS was being worked on James Dick Construction Limited, I will just call them JDCL for short, applied for the Rockfort Quarry and most of you know where that is, that is generally at the north east corner of Old Baseline Road and Winston Churchill Blvd. in the Town of Caledon. There were various appeals received with respect to the Rockfort Quarry Application and there was a lot of detailed stuff that happened in between, but to move ahead to the next important milestone, in November of 2003 the Ontario Municipal Board ruled that the policies about OPA 161, in other words these new Town of Caledon resource policies should apply to the Rockfort Quarry Application and the Rockfort Quarry Application should be updated to respond to the policies of OPA 161 and so the link back to what tonight's meeting is about which is the comprehensive broader scale environmental study is at OPA 161 is a policy that establishes the CBSES requirement. Just to talk a little bit more about the policy basis of CBSES, this is fairly complicated but I'll move through it quickly; I will be around for questions afterward, certainly, so I can elaborate on anything that you would like me to elaborate on. One of the things that OPA 161 did was it identified the so-called Caledon High Potential Mineral Aggregate Resource Areas or CHPMARA for short. During the Open House you probably looked at Schedule L in the Caledon Official Plan, it is the second display at the back and that is the schedule in our Official Plan that delineates the CHPMARA lands and basically those are areas that have been identified as having high potential for mineral aggregate extraction and they are to be protected for possible future extraction. Another thing that OPA 161 did with these CHPMARA areas was to break them out into two categories; resource lands and reserve lands and there were a number of different criteria that went into that

Policy Basis for CBSES


- OPA 161 sets out various requirements that have to be met by aggregate applications
- Additional requirements apply within "Reserve Lands"
- The CBSES is one of these additional requirements
- Despite the deferred status of Area 9-A, JDCL has agreed to prepare a CBSES



consideration and the results of that can also be seen in Schedule L. You will see that some of the CHPMARA lands have been identified as resource lands; some of them have been identified as reserve lands. There are additional policies that apply in the reserve lands, now the Rockfort Quarry Application is located in what is numbered as CHPMARA 9A and you may have noticed on the map that the status of area 9A has been deferred, in other words, it has not been determined finally if it is a resource land, if it is reserve land, if it should be on the map. The actual status of that area has been deferred to the future.



Purpose of CBSES

- To develop a science-based understanding of the natural environment within the resource area and "functionally connected" lands
- To develop an understanding of how the environment might respond to changing land uses (i.e. new quarries)
- To develop policies and management strategies to prevent unacceptable environmental impacts and to guide site-specific applications



This is Schedule L. I was mentioning it from the Caledon Official Plan. It is also on the Board at the back. Resource area 9A is in this location here and it is the overall resource area that is being studied and it is also the area within which the Rockfort Quarry Application is located. As I mentioned OPA161 sets out various policy requirements that have to be met by aggregate applications and there are additional requirements within reserve lands and this comprehensive, the CBSES is one of those additional requirements. Despite the deferred status of Resource Area 9A, James Dick Construction Limited has agreed to prepare a CBSES.

CBSES Study Area


Moving ahead to the purpose of the study, it is basically three-fold. First of all it is to develop a detailed science-based understanding of the environment in the resource area and functionally connected lands and what that means are lands that have some form of ecological connection to the bedrock resource area whether it be groundwater, wildlife, surface water, any sort of ecological connection to that resource area.

The second purpose is to develop an understanding of how that natural environment might react to changing land uses, for example, new quarries and thirdly the purpose of the study is to develop policies and management strategies to prevent unacceptable environmental impacts and to guide site-specific applications.

Just to touch on the Study Area, very briefly, you may wonder how we established that Study Area and as I mentioned the purpose of the study is to analyse Resource Area 9A and lands that are ecologically or functionally connected to that. Just to start out, Resource Area 9A is identified in red and what was determined initially to define the Study Area was basically looking at the major tributaries that flow through this resource area or nearby so essentially the one tributary area which has been labelled a second creek and another larger tributary area

Determining Detailed Study Requirements

- Lead agencies (Town, Region and Credit Valley Conservation) prepare recommended CBSES Terms of Reference in January 2004 – calls for JDCL to produce detailed CBSES Work Plan
- Ongoing discussions between agencies and JDCL regarding Work Plan requirements
- Latest detailed Work Plan produced by JDCL January 2007




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which is named Rogers Creek, through the results of the study that will be collaborated on later. There are also lands in this vicinity that are not identified in yellow but it has been determined they are groundwater connections to some of the tributaries that flow in these directions and they are also being studied so you will see on the boards and in the material that is being presented to you that this area is also being analysed because of the functional connections.

The next step was really to determine the detailed study requirements for the CBSES. There was a general policy outlined in the Caledon Official Plan but to turn that into detailed requirements, the starting point was the lead agencies, The Town of Caledon, The Region of Peel and the Credit Valley Conservation prepared a recommended “terms of reference” and we did that in January of 2004 and we provided that to James Dick Construction and one of the things that that terms of reference called for was for James Dick Cons. Ltd. To then develop a detailed work plan. The work plan being a very specific detailed outline of exactly what work would be needed to complete the study. There have been on-going discussions between the agencies and JDCL regarding work plan requirements and the latest detailed work plan was produced by JDCL this month, a couple of weeks ago it was provided to us. The agencies are still in the process of reviewing that but there has been general agreement on most of the areas required as part of the study.

Structure of CBSES

- Part A: Ecosystem Characterization
 - How the natural environment is functioning within the study area
- Part B: Sensitivity Analysis
 - Modeling potential environmental response/ impacts in relation to land use change
 - Developing initial environmental management objectives and targets




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Moving on to the structure of the study, it consists of three parts. Part A is called the Ecosystem Characterization and that is what tonight’s meeting is about. The draft Part A report that has been produced by JDCL and it is basically looking at how the natural environment is functioning within the Study Area. Part B which we haven’t gotten to but which we will be getting to and coming back to you on, we are calling the Sensitivity Analysis and that is part of the study process where we look at the potential environmental responses to changing land uses and how would the environment respond; what sort of impacts might occur if certain land use changes occurred. Then, that information would allow us to develop initial environmental management objectives and targets which will help us evaluate various management alternatives, set standards and so on and that is one of the things we hope to discuss with you in more detail at the Feb. 27th workshop.

Structure of CBSES

- Part C: Implementation
 - Comprehensive Adaptive Management Plan
 - Long Term Monitoring Plan
 - Site Specific study requirements
 - Policy conformity assessment
 - Other findings and recommendations



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The final component of the study is Part C. It is the implementation component and it will generally include these five parts:

- Comprehensive Adaptive Management Plan

- A long term monitoring plan

- It will outline site-specific study requirements

- It will review Policy Conformity

- It will also provide a general summary of other findings and recommendations, basically a grab bag of other good ideas that have come out of the study process.


We have two remaining slides. Just to recap the CBSES process to date. January 2004 the lead agencies developed the recommended terms of reference and began discussions with JDCL around that. In June of 2005 JDCL released the first draft of the Part A Report and held a public Open House. Many of you may have been at that. In November of 2005 the agencies provided detailed comments about that first draft Part A Report and we have been having discussions with JDCL on those comments for the better part of last year, really, from November of '05 to November '06 there have been on-going discussions and in Nov. 2006 JDCL released a revised draft Part A report and that is what we are here discussing with you tonight.

As part of those on-going discussions as well, Robb mentioned the agencies and James Dick Construction in consultation with this Coalition of Concerned Citizens agreed to jointly host a public consultation program in relation to this study.

In the last slide, really quickly touching on "next steps". One thing that we need to explain is that because these matters are before the Ontario Municipal Board the Board does get involved from time to time in the decision making process and in October of 2006 all of the parties submitted a timetable to the Board which the Board approved and we are now working within that time table. According to that timetable, I don't think it is an any of the handout material is it, it is in the draft work plan that we will be posting on our website so if any of you are interested in the detailed micro steps within that time line, that will be available to you. In general, Parts B and C of the study are to be completed between February and August of 2007 and there will be additional public consultation in those phases. In October of 2000, the anticipated completion date for the overall CBSES is August 2007. What will happen after that is the Rockfort Quarry reports will be updated to take into account the CBSES and the deadline for that work to be

CBSES Process To-date


- January 2004 – Lead agencies (Town, Region, Credit Valley Conservation) develop recommended CBSES Terms of Reference
- June 2005 - JDCL releases first draft Part A Report and holds Public Open House
- November 2005 – Agencies review and provide detailed comments on draft Part A Report
- November 2005 to November 2006 – ongoing discussions between agencies and JDCL on agency comments
- November 2006 – JDCL releases revised draft of Part A Report
- Agencies and JDCL agree to jointly plan a CBSES public consultation process



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Next Steps

- In October 2006, the Ontario Municipal Board established a timetable for remainder of CBSES/ Rockfort Quarry process
- Parts B and C of CBSES to be completed between February and August 2007
- Additional public consultation on CBSES will occur during this time
- October 2007 – Rockfort Quarry reports to be updated and released for review
- September 29, 2008 – Start date for Rockfort Quarry Ontario Municipal Board hearing



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released will be October 2007 and in the year following, various things will happen and that material will be reviewed by the public agencies and all of that is leading up to an anticipated start date for the Rockfort Quarry hearing of September 29th, 2008. That is it for my slides. Thank you. ■

SESSION 3

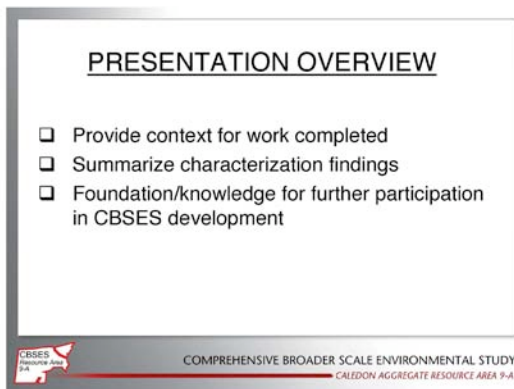
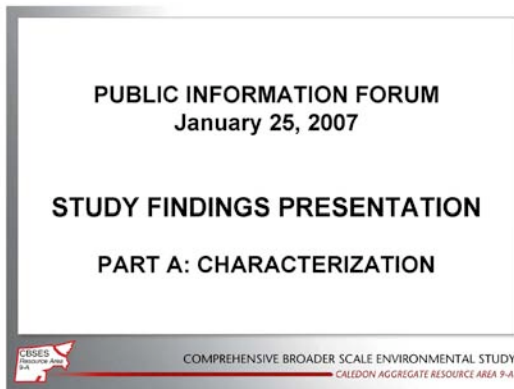
Richard Murphy's Presentation

Thank you Robb. As Robb told you, I am going to take you through some of the findings from the Part A work for the CBSES to give you a basic understanding of the types of work that was done and what our findings are. There is also a handout that you have been provided with, when you signed-in, two handouts – one is a copy of the presentation slides, the other is a handout that gives you a little more information about the kinds of work that was undertaken and why we were doing it and what was done. A little homework reading for you perhaps.

The knowledge I am going to give you tonight is hopefully interesting to you for general interest, but also starts to give you the background for further participation in the CBSES process and particularly for those of you that are willing to participate in the up-coming workshop on the objectives for the CBSES. Obviously there are a lot of details in the study and some very thick binders at the back of the room and I am not going to try to go through all that detail tonight or we will be here until Spring time I think.


The purpose of the presentation tonight is to give you context for the work completed. Summarize the characterization findings and provide that foundation knowledge for further participation in the CBSES development.

As Todd mentioned, there are three parts to the CBSES so I won't go through a discussion of what those are but just to clarify that I will be speaking to the Part A Characterization Report and you have got the handout and the presentation information but there is also copies of the report itself that can be made available to you on CD, so if that is something that you would like to have and to read or peruse, you can see Nick or Suzanne out at the front lobby and give them your contact information and if they can't give you a CD tonight, they will get one to you. Or, on the feedback form there is a space to check that off and you can leave that form either at the registration desk or in the box here and we will mail out a copy of that study to you. So that is the Part A Report which was released in November 2006 to both



CBSES STUDY COMPONENTS

- Components:
 - Work Plan
 - Part A – Characterization
 - Part B – Sensitivity Analysis
 - Part C – Implementation
- Part A findings – Focus of this presentation
- Revised Draft Part A Report was released to Agencies and Public on November 30, 2006
- Part A Report will be finalized at the end of the Study process




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MULTI-DISCIPLINARY STUDY

- Comprehensive Study involving various fields of expertise:

<input type="checkbox"/> Planning and Land Use	- MHBC
<input type="checkbox"/> Hydrology (Surface Water)	- CRA
<input type="checkbox"/> Hydrogeology (Groundwater)	- CRA
<input type="checkbox"/> Fluvial Geomorphology	- JTBES
<input type="checkbox"/> Water Quality	- LGL/CRA
<input type="checkbox"/> Aquatic Habitat and Fisheries	- LGL/Ecoplans
<input type="checkbox"/> Terrestrial Ecology	- LGL/Goodban
- In consultation with local agencies (& their experts)



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the agencies and to the public and that report is out in draft form for review. It will ultimately get finalized with the overall completion of the CBSES, which is planned for this summer in August.

The CBSES is a comprehensive and multi-disciplinary study looking at a number of different disciplines of science and planning and we have listed what those are here, there are further details on the different disciplines within your handout. Just for a brief overview, the CBSES includes planning and land use to help understand the potential long-term land uses within the Study Area and the requirements that are going to guide the development within the Study Area and we have James Parkin here tonight from MHBC who are looking after the planning component of the CBSES.

CRA is looking at the geology and the hydrogeology aspects. Hydrology being surface water, so that is precipitation, evaporation, flow of streams – that falls under the hydrology basket and hydrogeology is groundwater, so once water infiltrates into the ground it flows through the pore spaces in the soil and the rock and sometimes discharges back out to surface water. That is the hydrogeology or the groundwater component of this study.


Fluvial geomorphology, it is a little less known terminology but that is the science of looking at flowing water and how it affects the landscape. In simple terms it is essentially erosion and sedimentation, those processes and that is being looked at by JTB Environmental Systems.

Water quality is another important aspect of this study and we are looking at both the biological aspects as well as chemical aspects of the water quality looking at the suspended solids level, bacterial levels and so on in the water and that is being done primarily between LGL and CRA.

The aquatic habitat and fisheries are a very important part of the study and that is being looked at by both LGL and Ecoplans. The last main component of the study is the terrestrial ecology and terrestrial ecology is looking at all forms of living organisms in the environment so it is vegetation, wetlands, animals; mammals to amphibians to birds and that is being looked at by LGL and Goodban Ecological Services. In addition to all the different team members from the James Dick Team, we have had a lot of participation from the agencies within the study, particularly Credit Valley Conservation have had their scientists in each of their disciplines working with us on the work plan as well as the science. A number of them have been out with us working in the

PART A - CHARACTERIZATION

- ❑ Assess and document existing conditions for natural environment and related features, such as creeks, wetlands, fisheries, & forests
- ❑ Integrated Study based on existing information and extensive data collection
- ❑ Study process included both public and agency input



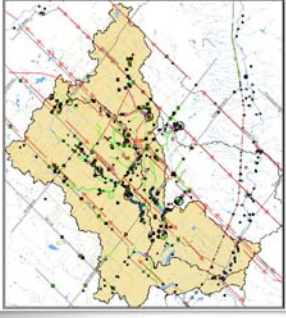

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field looking at these things so we thank the CVC for their participation in the study as it takes a lot of their time as well.

Moving on, the Part A Characterization Study, what is it? The Part A is really the assessment and documenting the existing conditions out in the Study Area and some of the areas out beyond the Study Area so that we make sure we understand the natural environment features and features related to it whether it is creeks, wetlands, water supply. It is important to understand what is out there, both so we know how it is working today, or in some cases maybe how it is not working quite as well as it could be, but also so we could understand what is the potential influences of changes in land use within this Study Area. So we need to know what is out there, how it works and then that forms the basis as we move into Part B and Part C of the study to understand what are the potential influences of change and then what kinds of things need to be looked after, what kinds of measures need to be put in place.

CBSES Field Program Monitoring Locations

- ❑ Historic data collection
- ❑ CBSES field program 2004 – 2006
- ❑ 100's of Data Collection Sites
- ❑ Six Nested Monitoring Stations

COMPREHENSIVE BROADER SCALE ENVIRONMENTAL STUDY
CALDON AGGREGATE RESOURCE AREA 9-A

The CBSES includes historical information that is available within the Study Area from studies done by agencies or site-specific studies and there are a number of those studies and quite a bit of that information is available. A starting point of the study was to look at that information and see what we know, see what the data gaps are, and from there design additional information and data collection programs to be executed through the CBSES. This was a process again where we had a lot of discussion with the agencies and their input into what kinds of information collection should go on.

So, this map summarizes many of the data collection points. It is also in the Part A Report in a little more clarity. You can actually see what all these dots on the map refer to, but basically showing we've got a wide distribution of data collection through the Study Area and much of the surrounding area. In addition to the historic data, we have been collecting data for three years now. From 2004 through 2006 there were field programs being conducted in the area and we have got literally hundreds of sites where we have been collecting data. The programs involved walking about 30 kms of creeks and related areas within the Study Area. We visited almost 40 properties of people living in the area there to see what is on their property and collected a massive database with many thousands of pieces of information about this area.

There were also six nested stations. They show up as the bigger dots like this one over here, these is two of them fairly close. Another one down here to the southwest of the resource area and those are nested

stations where we have gone in and collected a number of different kinds of data at that one location to give us an integrated picture of that area so we have that information on fish, on stream flow, on water quality, on vegetation, all the different aspects of the data collection that are applicable in that area. We have gone and focussed them there so that gives us an integrated picture at those key locations and it also serves as a potential long-term monitoring spot for this Study Area where there could be an on-going monitoring program to see what changes over time. Many of you have participated in this process of data collection by allowing us access to your properties, or talking to us when we are out in the field or talking to us at this open house or the one in 2005 to tell us what is on your property, to tell us about features that you are aware of, to invite us to your property. So we have been on a lot of your properties and I just wanted to take the opportunity to thank all of you that have made those opportunities available for us. We understand that it is not always easy to have somebody come and look in all the bushes and wetlands on your property so we appreciate that. Thank you.

The next slide, I am not going to talk about this one. It is just a summary of the data collection that has gone on there; there are more of those details in your handout and in the report.

CBSES FIELD PROGRAM


- ❑ The 2004, 2005, and 2006 field data collection program included:
 - ❑ Site visits to 37 properties
 - ❑ Walked/mapped over 30 km of creeks, ponds wetlands, ditches
 - ❑ 34 surface flow & water level monitoring stations (measured monthly)
 - ❑ Water well survey & water level monitoring (23 wells monitored in the Spring & Fall of 2005)
 - ❑ Installation & monitoring of 18 wetland and streambed piezometers (monitored monthly over 2006 field season)
 - ❑ Stream morphology assessment
 - ❑ Water chemistry sampling & stream temperature monitoring
 - ❑ Macro-Benthics sampling
 - ❑ Aquatic habitat monitoring (8 sites)
 - ❑ Electrofishing sampling (28 sites)
 - ❑ Dip netting sampling (48 sites)
 - ❑ Brook Trout spawning surveys (within cold water reaches)
 - ❑ 12 wetland monitoring sites
 - ❑ 40 frog call monitoring sites
 - ❑ 45 bird point count sites
 - ❑ 18 breeding bird monitoring sites
 - ❑ Wildlife surveys
 - ❑ Numerous roadside observations

COMPREHENSIVE BROADER SCALE ENVIRONMENTAL STUDY
 CALEDON AGGREGATE RESOURCE AREA 9-A

Now to take a look at the Study Area as Todd has already oriented you here on where we are on the Study Area, I will just add where we sit with respect to the Credit River. We are essentially in the Middle Region of the Credit River Watershed and we have got the Credit River running right down the right hand side of this drawing with Cheltenham area up here to the north, the main Credit River runs down through Terra Cotta down here within the Study Area and then Glenn Williams will be further down off the map to the south.

STUDY AREA

- ❑ Two subcatchments within Subwatershed 12:
 - ❑ Rogers Creek
 - ❑ Second Creek
- ❑ Additional work completed to the east

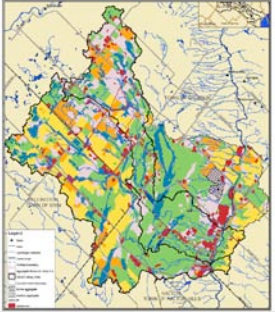


COMPREHENSIVE BROADER SCALE ENVIRONMENTAL STUDY
 CALEDON AGGREGATE RESOURCE AREA 9-A

Let's talk for a minute about what is in the Study Area just as a general overview so we have all got clear picture of the landscape. The land use in the area is typical of rural Ontario, it has a mixture of agriculture, recreation and rural residential uses and with Terra Cotta being really the only settlement area within the Study Area. Terra Cotta being down below the Escarpment here adjacent to the Credit River. The Study Area exhibits a low amount of property or lot fragmentation. There is not generally many severances granted in the area and this means that we have a relatively low population density through most of the Study Area. It is evident there is a strong connection here between the quality of life and recreation opportunities within the area and that many of these are linked to the natural resources within the Study Area.

STUDY AREA

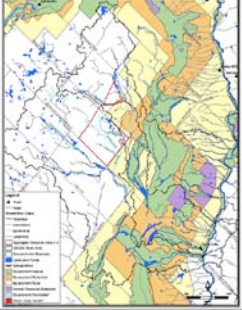
- ❑ Land use typical of rural Ontario (e.g., agriculture, recreation, and rural residential)
 - ❑ Low level of lot fragmentation
 - ❑ Low population density
- ❑ Quality of life and recreational opportunities linked to natural resources



COMPREHENSIVE BROADER SCALE ENVIRONMENTAL STUDY
 CALEDON AGGREGATE RESOURCE AREA 9-A

STUDY AREA

- ❑ Planning policies restrict development
- ❑ 39% of Study Area within Niagara Escarpment Plan area
- ❑ Niagara Escarpment, associated features & policies influence land use
- ❑ Study Area also located within the Greenbelt Plan



CBSES
Comprehensive Broader Scale Environmental Study
CALLEDON AGGREGATE RESOURCE AREA 9-A


For the Part A report, all of the applicable land use planning policies were reviewed and analysed to determine the likely land use scenarios for the Study Area and the goal of this was to understand the potential for changes within the Study Area. What is evident is that the current planning policies provide a lot of restrictions on the development within the area. One of the foremost is the Niagara Escarpment Plan area which is shown on this figure here. We have 39% of the Study Area within the Niagara Escarpment Plan. Now within the Plan areas, that doesn't mean nothing can change but there are controls within the Plan for the land use. The permitted uses within the Natural and the Escarpment Protection Areas which are shown here in green and orange colours are quite limited. In the Escarpment rural area, which are shown in yellow, there is contemplation there of some resource and recreational related uses such as aggregate extraction and golf courses would be examples of the types of uses that could occur there.

The Study Area is also within the Provincial Green Belt Plan Area and that is restrictive of urban uses. The Greenbelt Plan provides the protection of agricultural and environmental resources. It also recognizes the important natural resources and supports a range of recreational and tourism uses. Aggregate extraction is also permitted within the plan area subject to some new restrictions and some strict requirements related to rehabilitation conditions.

We have taken the Study Area and split it into three broad regions based on the physical and ecological characteristics so that we had a little smaller groupings to work with as there is quite a bit of variation within the Study Area.

STUDY AREA REGIONS

- ❑ Study Area subdivided into three general regions based physical and ecological characteristics:
 - ❑ Upper Region: Headwaters of the Paris Moraine
 - ❑ Middle Region: Area between Paris Moraine and Escarpment
 - ❑ Lower Region: Niagara Escarpment (above, below and Escarpment itself)

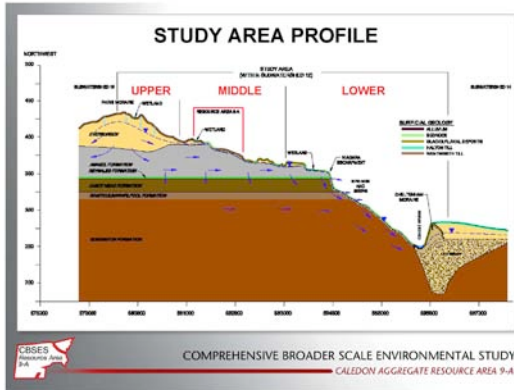


CBSES
Comprehensive Broader Scale Environmental Study
CALLEDON AGGREGATE RESOURCE AREA 9-A

The Upper Region which is shown here, if you can read that, and there is a red dash line that is running sort of diagonally across the page there. The Upper Region corresponds to the Paris Moraine, so it extends from the top of the water shed which is the top of the Study Area here so that is essentially the height of land across the top of the moraine or the Grange as it is referred to; the Upper Region extends from there down to this point which is essentially the toe of the Paris Moraine where the overburden thins out and that coincides with 5th Sideroad here to the southwest within the Town of Erin.

The middle Region is essentially the next land below the Paris Moraine and we have broken it up down to Ballinifad Rd. here over in Erin/Halton Hills so we are dealing with that area between the Paris Moraine and the Niagara Escarpment. The Lower Region going south

or southeast from Ballinifad Rd. is the lands around the Escarpment, the lands immediately above the Escarpment and down the slope to the Credit River.



If we look at the following slide here we can see this in cross section and I talked to a number of you at the back of the room about this cross section because it is a useful way to look at what is going on and explain some of the differences. I will just go briefly here and point out that the Upper Region is here, it is sitting on this tan lump here which is the Paris Moraine so that is a thick deposit of overburden soils sitting on top of this grey bedrock. This grey bedrock being the Amabel Dolostone which you will see in a number of places along the Escarpment because it is a very durable rock and forms the crest here of the Niagara Escarpment, it is known as the “cap” rock of the Escarpment. The Middle Region then as extending from the toe of the moraine as I mentioned down to, near the Escarpment here at Ballinifad Rd. and then the Lower Region goes down over the crest of the Escarpment and all the way down past Terra Cotta, which is sitting here and down to the Credit River. Just for interest, what we are showing here is – this reddish brown colour is – that is representing Queenston shale which a number of you know the name – more of you know that red rock that you see down below the Escarpment and it extends out into the plain below the Escarpment and is sitting down here in Brampton. That is the Queenston shale deposit. Along the Credit River is an old fluvial channel that has been eroded into the bedrock and backfilled with overburden soil material. So, in very broad terms what is happening within our Study Area is that we have a recharge of water from precipitation, rainfall, snow melt up here on the Paris Moraine and the topography allows water to infiltrate. Water flows through our Study Area essentially flowing through the Middle Region and then water discharges out the ground surface or to the Credit Valley River in the Lower Region. So, in this figure, water flows from left to right from the Moraine down to the Credit River.

UPPER REGION


- Major landform is the Paris Moraine
- Predominantly agricultural land use
- Mostly outside the Niagara Escarpment Plan Area

COMPREHENSIVE BROADER SCALE ENVIRONMENTAL STUDY
CALEDON AGGREGATE RESOURCE AREA 9-A

I’ll jump in now to the Upper Region and talk a little bit about what we found within the Upper Region. I have mentioned the major landform there is the Paris Moraine. The land use is predominantly agricultural in nature and it is almost entirely outside the Niagara Escarpment Plan area.

UPPER REGION

- Headwater region of the Study Area
- Primary water functions: groundwater recharge & storage
- Most watercourses are intermittent (flow part of the year)
- Some springs/seeps occur
- Limited perennial (flow all year) reaches – intermittent flow downstream
- Water quality is good, but "hard"


 COMPREHENSIVE BROADER SCALE ENVIRONMENTAL STUDY
 CALEDON AGGREGATE RESOURCE AREA 9-A


This area forms the headwaters for the Study Area. The primary water functions as I mentioned are the recharge and storage of groundwater within the Paris Moraine and that is facilitated by that hummocky topography of the Paris Moraine where there are depressions in the ground surface that aren't well drained. Water can't drain out of there in the Spring and after rainfalls so it slowly infiltrates into the ground.

Most of the watercourses in this area are intermittent in nature, which means that they are only flowing for part of the year. There are some limited perennial reaches, perennial being water courses that flow almost all of the year in most years so it is something where you have continuity of flow. The perennial reaches in the Upper Region are limited and downstream from them the water re-infiltrates into the ground and they become intermittent, so you may have a short stretch of water all year round but downstream from there things will dry up again during the dry season.

In general within the Upper Region water quality is good. Water quality is very hard because the carbonate or the limestone nature of the overburden soils there. Those of you who live there have lots of scaling and so on with your water, but generally it is good, potable water. The principal concerns for water quality up there would be nutrient management issues, and also the lack of riparian buffers in a lot of the channels.

UPPER REGION


- Small channels with limited fluvial processes
- Generally fine-grained stream substrate
- Limited natural riparian / streamside vegetation
- Number of small on-stream ponds
- Fish communities dominated by warm water forage species - seasonal


 COMPREHENSIVE BROADER SCALE ENVIRONMENTAL STUDY
 CALEDON AGGREGATE RESOURCE AREA 9-A

Within the stream channels themselves, they are generally small and have limited fluvial processes because they are small watercourses. The substrate or the bottom sediments of the creeks are generally fine-grained and that is generally important from the aquatic habitat perspective. They generally lack a lot of riparian cover which is also an important habitat consideration. So the resulting fish communities are dominated by what are termed warm water forage species and that is potentially minnows to most of us. These fish communities depend on just what is happening with the flow in the local regions of the creek, with the communities generally being seasonal fish.

UPPER REGION


- Vegetation dominated by cultural and successional communities
 - Often on abandoned agricultural lands
- Larger wetland & woodland blocks:
 - Deciduous forest, conifer plantation & wetland
 - Headwaters for Second Creek and Rogers Creek
 - Ballinifad Ridge & Belfountain PSWs
- Some rare/sensitive species identified (e.g. Red-Headed Woodpecker)
- Paris Moraine forms part of regional natural corridor


 COMPREHENSIVE BROADER SCALE ENVIRONMENTAL STUDY
 CALEDON AGGREGATE RESOURCE AREA 9-A

Looking at vegetation. Vegetation is dominated by cultural and successional communities a lot of it from abandoned fields, but there are larger blocks of wetlands and woodlands in the Upper Region and these include a mix of deciduous forest, plantations, wetlands and these areas tend to be the headwaters areas for Second Creek and Rogers Creek. They include the Ballinifad Ridge and Belfountain Provincially Significant Wetlands (PSW).


MIDDLE REGION

- Groundwater & surface water flow through region
- Local discharge & recharge interactions – varying seasonally
- Seasonal and permanent springs
- Watercourses predominantly intermittent
- Discontinuous reaches of perennial flow - associated with groundwater discharge areas & local topography
- Water quality is good, but “hard”


 COMPREHENSIVE BROADER SCALE ENVIRONMENTAL STUDY
 CALDON AGGREGATE RESOURCE AREA 9-A


MIDDLE REGION

- Flatter topography between Paris Moraine & Escarpment
- Thin soils with bedrock outcrops
- Predominantly agricultural land use
- High potential mineral aggregate area
- Niagara Escarpment has some influence on land use, but not as great as within Lower Region


 COMPREHENSIVE BROADER SCALE ENVIRONMENTAL STUDY
 CALDON AGGREGATE RESOURCE AREA 9-A


MIDDLE REGION

- Groundwater & surface water flow through region
- Local discharge & recharge interactions – varying seasonally
- Seasonal and permanent springs
- Watercourses predominantly intermittent
- Discontinuous reaches of perennial flow - associated with groundwater discharge areas & local topography
- Water quality is good, but “hard”


 COMPREHENSIVE BROADER SCALE ENVIRONMENTAL STUDY
 CALDON AGGREGATE RESOURCE AREA 9-A

MIDDLE REGION

- Variety of stream forms with varying fluvial processes & flow - defined channels, wetland flow
- Relatively diverse substrates, including cobbles & gravel
- Generally limited riparian/streamside vegetation
- Numerous small on-stream & off-stream ponds
- Fish community dominated by cool and warm water forage species – seasonal and perennial reaches
- Brook Trout in downstream areas – near Ballinifad Road


 COMPREHENSIVE BROADER SCALE ENVIRONMENTAL STUDY
 CALDON AGGREGATE RESOURCE AREA 9-A

There have been some rare and sensitive species identified in the Upper Region and an example is the Red Headed Woodpecker. The Paris Moraine is recognized to form part of a natural wildlife corridor in the area.

So looking to the Middle Region, the Middle Region we have a somewhat flatter topography coming off the moraine and we have an area now where we generally have thin, overburden soils with bedrock outcrops. Again the land use is predominately agricultural but a little less so than in the Upper Region. This area includes the prime mineral potential, aggregate resource area, which is the focus of the study. As mentioned previously the Niagara Escarpment has some influence on land use in this area but not as great as within the Lower Region.

With respect to groundwater and surface water as I mentioned this is a flow through region within the Study Area and what we see is with the local topography and seasonal water level variations in the Spring and Fall we get variable patterns of groundwater discharging and re-infiltrating into the ground. The flow varies from place to place and with the seasons. The watercourses are again predominately intermittent, however, there are a number of perennial flows, so we have this pattern in the Middle Region of flow between flowing all year and flowing part of the year as we go down the watercourses. Similar to the Upper Region the water quality is good but hard.


A little more variety in the streams flow here as we get a little more developed channels. There are still areas where we see wetland, flow conditions and others with relatively diverse substrates, including cobbles and gravel within the aquatic environment. It generally has limited riparian or streamside vegetation.

Fish community is dominated by cool and warm water forage species. We are starting to see some cool water species as we move into the Middle Region and this is based on having some area for variations in groundwater discharge and infiltration conditions. We do have Brook Trout showing up in the downstream regions near Ballinifad Rd and those are dependent of groundwater discharging in those areas.

The last slide here with regard to the Middle Region is with respect to vegetation. Outside the agricultural lands, the vegetation includes a mix of cultural and natural communities. There are a variety of wetlands and woodland blocks that vary in age, size, shape and species, etc. There are some larger blocks associated with both tributaries and again some rare or sensitive species have been identified, for example the Eastern Milk Snake.

LOWER REGION


- ❑ Major landform is the Niagara Escarpment
- ❑ Thin soils with bedrock outcrops
- ❑ Predominant land use is forested areas
- ❑ Large blocks of publicly-owned land
- ❑ Location of the only settlement area - Terra Cotta
- ❑ Land use is controlled/limited by the Niagara Escarpment Plan throughout the Lower Region


 COMPREHENSIVE BROADER SCALE ENVIRONMENTAL STUDY
 CALEDON AGGREGATE RESOURCE AREA 9-A

Moving to the Lower Region, there are different characteristics showing up in the Lower Region. Here we have the Niagara Escarpment and predominant land use here is forested areas, there are a number of large blocks of publicly owned land. The land use in this area is largely controlled by the Niagara Escarpment Plan, throughout the Lower Region.

LOWER REGION


- ❑ Regional area of groundwater discharge
- ❑ Local discharge and recharge interactions – varying seasonally
- ❑ Seasonal and permanent springs
- ❑ More perennial flow in watercourses, especially below Escarpment
- ❑ Water quality exhibits increased mineralization from shale bedrock


 COMPREHENSIVE BROADER SCALE ENVIRONMENTAL STUDY
 CALEDON AGGREGATE RESOURCE AREA 9-A

It is the regional area of groundwater discharge so you have local discharge and recharge interactions that vary seasonally. Within this region you will get seasonal and permanent springs. There is more perennial flow in watercourses, especially below the Escarpment. The water quality exhibits increased mineralization from shale bedrock.

LOWER REGION


- ❑ Defined channels supporting fluvial processes
 - ❑ Well-developed physical habitat – pools, "riffles"
- ❑ Diverse substrates with cobble, gravel, some bedrock
- ❑ Several large on-stream ponds or groups of ponds
- ❑ Generally well-developed natural riparian / streamside vegetation
- ❑ Fish community includes cool and cold water (brook trout) species


 COMPREHENSIVE BROADER SCALE ENVIRONMENTAL STUDY
 CALEDON AGGREGATE RESOURCE AREA 9-A

There are defined channels supporting fluvial processes. There is a well developed physical habitat with pools and riffles. The greater amount of groundwater discharge in this region supports fish communities that include more cool and cold water species, including brook trout.

LOWER REGION

- ❑ Extensive areas of deciduous forest with wetland areas
- ❑ Caledon Mountain Slope Forest ANSI/ESA
- ❑ Terra Cotta Forest ANSI/ESA
- ❑ High diversity of species
- ❑ More rare/sensitive species (e.g. Red-Shouldered Hawk, Louisiana Water Thrush, Ginseng)
- ❑ Escarpment forms part of regional natural corridor



 COMPREHENSIVE BROADER SCALE ENVIRONMENTAL STUDY
 CALEDON AGGREGATE RESOURCE AREA 9-A

The Middle Region has extensive areas of contiguous deciduous forest with wetland areas. The Caledon Mountain Slope is an area of Natural and Scientific Interest (ANSI) and an Environmentally Significant Area (ESA). You find more rare or sensitive species, for example the Red-Shouldered Hawk, the Louisiana Water Thrush and Ginseng. The Escarpment forms part of the regional natural corridor.

Comprehensive characterization work has been undertaken in consultation with the Agencies. This characterization is described in detail in the Draft Part A Report of November 2006. Part B will show the modelling and sensitivity analysis utilizing this characterization. The upcoming workshop will help to define the direction for Study Area planning and public participation is invited. ■

NEXT STEPS

- ❑ Comprehensive characterization work has been undertaken in consultation with the Agencies
- ❑ Characterization is described in detail in the Draft Part A Report (November 2006)
- ❑ Part B modelling and sensitivity analysis utilizing this characterization
- ❑ Upcoming Workshop to help define direction for Study Area planning – public participation is invited


 COMPREHENSIVE BROADER SCALE ENVIRONMENTAL STUDY
 CALEDON AGGREGATE RESOURCE AREA 9-A

SESSION 4 OPEN DISCUSSION

QUESTION #1:

Did the Town of Caledon prepare the first presentation?

Yes. (Todd Salter)

The “Policy Basis for CBSES” slide reads “Despite the deferred status of Area 9-A, JDCL has agreed to prepare a CBSES”, is this not showing a bias by the Town of Caledon?

The wording was not intended to imply a bias. The status of 9-A has been deferred. “Notwithstanding” would have been a better word choice than “despite”. (Todd Salter)



QUESTION #2:

There are omissions in tonight’s presentation, such as naturally occurring springs throughout the area and natural wildlife. What else are you not declaring or omitting?

Yes, there are naturally occurring springs and wildlife species in the Study Area. Tonight’s presentation was intended to provide a high level overview. If you look at the Part A Report, you will see a higher level of detail. It would not be practical to discuss every single spring. There are extensive lists in the Part A Report. (Richard Murphy)



What would happen if the grout curtain were to crack due to freezing weather? Water fractures are hidden. Would JDCL repair the crack?

The grout curtain is subsurface, and is not subject to freezing. If water were to leak and it is flowing rapidly through the quarry face, it would be detectable. Monitoring occurs outside of the curtain. If water leakage is too high the grout curtain can be tightened. (Richard Murphy)

We are worried about not being able to control the water, especially with the blasting.

The Preliminary Design Report looked at blasting and concluded that it was safe. In the worst-case scenario, if there was a leak, the curtain could be rapidly regouted. (Richard Murphy)



Are there any other quarries of this type with a grout curtain in Ontario?

No, there are no quarries in Ontario with a grout curtain. However, this type of installation has been demonstrated to work on Rockfort property in a demonstration program. (Richard Murphy)

Robb Ogilvie has offered to pay anyone \$20.00 for any species of wildlife that exists in the Study Area that has been omitted from the Part A Report.



QUESTION #3:

I would like to better understand the regulatory requirements. Where is the need and justification addressed as part of the environmental process?

The Town of Caledon cannot address the need. Need is not a requirement as per the Province of Ontario. There is not a need to prove that there is a need for the resource. There is no requirement for the applicant to demonstrate need. (Todd Salter)

In Reserve Lands, why is it appropriate if other areas are available?

The OPA 161 policies were more involved. Reserve Lands require additional studies as compared to Resource Lands. JDCL will complete additional studies. The proponent has to provide justification/evidence for Resource Land versus Reserve Lands. To some extent there will be a need to look at need. (Dan Kennaley)



(Note: The following is a clarification to the answer given during the workshop. Please note that the representative wanted this insertion to clarify the answer given that evening.)

Does the CBSES strictly focus on environmental conditions and not consider socio-economic impacts?

As I understand it, the report prepared by JDCL does not directly address economic or social impacts. But I would say that one of the reasons the agencies want to see this study completed is so that we have a detailed understanding of how the ecosystem is functioning in the area and what is important about it, so that it (the ecosystem) can be properly maintained and managed if, for example, quarrying was to start occurring in the area. It has been acknowledged in the Draft Part A Characterization Report that all of the private water supplies in the Study Area are based on groundwater, except for a small Regionally operated municipal water supply system in Terra Cotta which gets its water from wells outside the Study Area. The CBSES will be assessing potential impacts on the groundwater system and therefore potential impacts on private water supplies will be a consideration in the study. This is not explicitly being characterized as a socio-economic impact but it is being addressed through the study work. (Todd Salter)





Follow up: So the answer is the report is not directly looking at socio-economic impact. Where there is an environmental pathway that could lead to a socio-economic impact, these might be picked up, but if there is something that is purely of value from a socio-economic perspective it is outside the study scope? (Robb)

Correct. (Todd Salter)

QUESTION # 4:

Resource Lands versus Reserve Lands, when will it be determined? Will there be an amendment to OPA 161? Is it appealable? Will it be finalized before the OMB hearing?

If it ends up at the OMB, it will be addressed through the OMB. (Todd Salter)

What is the Town's position?

The Town's position has been deferred. (Todd Salter)

QUESTION # 5:

When will the data collection end? Will there be ongoing monitoring?

The bulk of monitoring and fieldwork has been completed. (Richard Murphy)

The policies of the Town require an aggregate applicant to describe the nature of impacts and how they will be mitigated. I understand that once an applicant is granted a license he can easily apply for a mobile asphalt or cement plant. How will the impacts from an asphalt and cement plant be dealt with under the Town's Policy?

There is no guarantee that the Town will permit those uses. Each application will be evaluated and impacts mitigated. The Town could prevent uses. (Dan Kennaley)

QUESTION # 6:

There are 23 well sites and I was a scheduled site. There is a cement cap on my well that weighs 100 pounds. I did not receive any advanced notice and now I have been removed from the list. I would like better notification and to be put back on the list.

We will look into it. We do have a good set of information already, but we will follow up on this. [Further information is provided in responses to other questions (#4).] (Richard Murphy)



I would like some accountability. Is my well part of the 23 that are being monitored? Will my well be protected?

No, your well would not be included in the 23 being used for the CBSES groundwater elevation measurements. Your well will be protected as part of any site-specific development requirements. (Richard Murphy)

QUESTION #7:

Figure 2.1, "Land Use" from the "Study Area" slide, is it defining the settlement areas?



It is a land use map, showing some of the severed lots, but not all of the lots. It is meant to provide a general impression. (James Parkin)

There are some residents missing?

It is a rough representation. (James Parkin)

The map is missing some of the higher density areas. It is based on a 2004 map, should a more current map be used?

There is no bearing on the result. (James Parkin)

It should show the higher densities and should reflect current information.



We have tried to keep it up to date, but it is not a continuous process. (James Parkin)

QUESTION #8:

I have white-tailed deer and coyotes on my property. Fish and birds were mentioned. Are you accounting for large mammals?

Yes, all forms of wildlife will be accounted for. Tonight we have focused on animals that depend on water, groundwater and creeks. (Richard Murphy)

All animals in the food chain are affected by water. Is this in the Report?

Yes, this is recognized. The Report is more detailed than the presentation tonight. Part B of the Report will look at the potential effects of changes to water on terrestrial aspect. (Richard Murphy)





QUESTION #9:

There are 5 criteria for resources to be active versus reserve. Study Area 9-A failed all tests. Was Study Area 9-A deferred because of James Dick? Was deferring allowing the full acceptance of OPA 161?

There are 8 factors to classify lands as resource or reserve. One factor was need. The applicant needed to show need. The Town characterized the land as reserve. One of the reasons there was agreement to the deferred status was to have a settlement with the aggregate industry. The status has been deferred. The hearing will evaluate to see if the quarry application will be approved. (Dan Kennaley)

Can anyone tell me the number of tons of dolostone in Study Area 9-A above or below the water table?

I cannot. (Todd Salter)

More below than above. (Richard Murphy)

Is this something that can be looked into back at the office?

(Robb Ogilvie)

Yes, we will be able to provide you with an estimate. [See responses to other questions (#2).] (Richard Murphy)



In cases where the landowner claims damages, how do you prove that the development caused the damages, especially if your well is not in the Study?

Part A of the Study focuses on inventory. Part B is a sensitivity analysis. Part C provides recommendations and requirements for the development and the monitoring program for domestic wells around the site. Measures will be in place. (Richard Murphy)



QUESTION #10:

In terms of the grout curtain, can you provide an example of this scale in this rock formation?

Yes, there are other examples of carbonate bedrock with a grout curtain. (Richard Murphy)

Will the Summary Report include examples?

The Rockfort application document has examples in the Appendices. [Refer to other responses (#3).] (Richard Murphy)



If the landscape changes, what is going to precipitate those changes to the water and the rock even though it is in other reports?

We will include this information in the Summary Report. (Robb Ogilvie)

QUESTION # 11:

What criteria were used to decide which wells would be included in the Study?

We had 100s of water level measurements from the Ministry of the Environment (MOE). They keep all well data. We did a representative set of water levels with better accuracy than MOE, about ± 20 wells. We assessed 40 wells in terms of suitability access, health and safety etc. The representative set of about 20 wells provides a suitable network for monitoring. (Richard Murphy)



What if there is a catastrophe not in the Study Area?

Regardless, the well is protected under the Ontario Water Resources Act. The Ontario Ministry of Environment enforces protection of water supplies from interference. (Richard Murphy)

What if it is a well that was previous not monitored?

All wells are protected regardless of whether it has been monitored. Before any extraction begins, there will be another opportunity to have your well monitored. (Richard Murphy)



QUESTION # 12:

Has the haul route been identified?

Yes, a route was identified in a separate Study. There was Traffic Study that explained why that particular route was selected. The report is available to the public. (James Parkin)

Where?

At the Town of Caledon or at the Coalition of Concerned Citizens. (James Parkin)

Does it discuss the impact on the landowners?

Yes it does. (James parkin)

One species that has not been identified is the homo sapiens.

There is a section in the Draft Part A Report on the social conditions, land use and human uses like recreation. (Section 4.1) (James parkin)



Does this link back to the socioeconomic question? (Robb Ogilvie)

Yes, there are more details in the Report. (James Parkin)

QUESTION # 13:

**Whose liability is it to maintain the environmental standards?
What is the cost of environmental damage? Who is paying?**

This will be addressed in the Part C Report. (Robb Ogilvie)

**Who has the responsibility if things need to be fixed/
rehabilitated?**

The proponent has the responsibility, while the various agencies will play a regulatory role. (Todd Salter)



QUESTION # 14:

Water is a concern for everyone. Terra Cotta had to go off a well system once Brampton Brick began operations. Things are fine up here in Caledon. If the water deteriorates, will it be the Region of Peel or the Town of Caledon that will be bringing us water?

It is the Region's responsibility to provide municipal water supplies. Impact to local wells is one aspect that we would continue to monitor. There are certain performance measures that are considered as part of the site specific application. If a system was required, and if it was attributed to the quarry, it would be at the proponent's expense. (Simone Banz)

How do you prove it if there is a problem?

There would be an analysis done as part of the site-specific application. (Simone Banz)



Who paid for Terra Cotta?

The taxpayers from the Region of Peel. (Note: The following is a clarification to the answer given during the workshop. Please note that the representative from Peel Region wanted this insertion to clarify the answer given that evening.) **"The capital cost of the Cheltenham system to which Terra Cotta is connected was paid for in part by Brampton Brick as part of a site specific quarry application. The ongoing operating and maintenance cost is paid for by Peel and the residents pay for the water they use."** (Simone Banz)

QUESTION # 15:

Who do we contact to get our well monitored?

Monitoring is site specific to a particular development. There would need to be a development or application in your area. (Richard Murphy)

What should we watch out for?

Development activity, then a request could be made to the developer. (Richard Murphy)

Where can I get information on health risks for living around a quarry?

There are no real health risks. Regulations and agency requirements provide protection. There are health and safety considerations for working at a quarry. (Richard Murphy/James Parkin)



QUESTION # 16:

In the Middle Region of the Study Area there is little ground cover. What are the effects of seismic vibration because of the blasting?

This is a separate site specific study requirement, the study of blast noise and vibration. It is based on criteria set out by the government. (James Parkin)

What if there is damage to my house?

It is a requirement to complete pre blast surveys. Good blast design and monitoring will protect houses in the area.. (James Parkin)

If there is damage, what then? (Robb Ogilvie)

A Report has been completed, discussing how the limits will be met. (James Parkin)

Where is this Report?

A copy of the Report is available from the Coalition of Concerned Citizens or the Town of Caledon. (James Parkin)

What is the name of the Report?

Blast Impact Assessment Report (James Parkin)

Who pays for any damages?

The operator. (James Parkin)





QUESTION # 17:

The Niagara Escarpment has been identified as part of the UNESCO World Biosphere Reserve. Are we really going to blow up part of the World Biosphere?

Mining is a permitted activity in the biosphere reserve. The site is outside the Plan Area. The Niagara Escarpment Plan allows mineral extraction. It is not an incompatible activity. (James Parkin)



QUESTION # 18:

If something happens, the proponent takes the financial burden. If the proponent goes bankrupt, what happens? Are they allowed to just walk away? At what point do they have no responsibility?

This matter is currently under review. Further information will be provided at a later date. Leave it with us and we will discuss it with the appropriate people. (Todd Salter)



QUESTION # 19:

At one point the pit will be full of water. At what point is this analyzed?

Part B. It is not specific to the Rockfort application. (Richard Murphy)

QUESTION # 20:

Will we have a chance to publicly respond to the blasting report?

Many reports have to be updated according to the timelines established by the OMB. Some have undergone peers reviews. It is currently undergoing a peer review. (James Parkin)

QUESTION # 21:

Are there studies documenting the devaluation of properties within the Study Area, as compared to properties not within the Study Area?

There have not been. (James Parkin)

There should be.

The Caledon Aggregate Policy requires that applications consider effects on property – visual, dust, well water, environmental. These have been studied, but not a specific study on devaluation of property. (James Parkin)

Will a specific study be completed?

It is not a requirement. (James Parkin)

Anything close to a quarry will be devalued. This is a serious situation. Will a study be performed showing values will not change? Will there be compensation?

I am not aware of any such study. (James Parkin)



QUESTION # 22:

Is a requirement of the Study to look at the impact of dust and oil fumes on the lungs of animals? Is there a study?

There is the Dust Study. (James Parkin)

For diesel?

Yes. (James Parkin)



What about animals that die from these effects, does the Study cover this?

There are trucks all over Ontario and animals are not dropping dead. If you could prove that animals were dying because of the trucks, JDCL would be responsible. (James Parkin)

QUESTION # 23:

What is the nearest aquifer to the Study Area?

The Amabel Aquifer. (Richard Murphy)

What is its volume?

It is huge, so it is hard to quantify.

Did you factor in the aquifer volume that could travel into the pit? Could you show us the impact on the aquifer?

Yes, Part B of the Study will do this.



QUESTION # 24:

Has an area ever been found to be unsuitable for aggregate extraction? We do not seem to be asking if we should have a quarry, just when it will happen.

This is the first Study like this. Yes, there are places that are not suitable for quarry based on the regulations set by the Province. The Aggregate Industry accepts this. This area has been identified by the Town of Caledon, the Region of Peel as a high potential area and JDLC has to evaluate to see if all tests can be met. (James Parkin)



QUESTION # 25:

Is this an academic exercise? What is in it for the community?

You will have to answer that question yourself. I cannot answer that question on behalf of the residents. (Todd Salter)

QUESTION # 26:

There have been various appeals. There were 971 written objections to the quarry. Please remember that.



QUESTION # 27:

Studies show us what we already know, that this is a delicate and complex area. UNESCO has identified the Niagara Escarpment as part of the World Biosphere Reserve. Does anyone have any business making a huge hole on the edge of this delicate system? The damage will already be done. Irreparable damage. The Town has the power to say Reserve or Resource.

There is a right to apply for a quarry based on the policies established by the Province of Ontario, Region of Peel and Town of Caledon Official Plans. This area has been identified as a high potential mineral aggregate resource area. The proponent has a right to make an application and must pass the tests. The Town does not have the final decision making power in this instance because the matter is before the Ontario Municipal Board. The OMB is the final decision making body. The decision making power has been removed from the normal regulatory bodies. (Todd Salter)



QUESTION # 28:

If the Rockfort application goes ahead, does that open up the entire area?

I do not know. If the application is approved, the whole resource area may not be automatically redesignated. To say more, would be speculation. (Todd Salter)

QUESTION # 29:

Who is doing the peer review for the water impact?

Andy Hims of Jagger Hims.



QUESTION #30:

Residential/people/homo sapiens are not represented as compared to other factors. They truly need to be considered in the broader scale.

We will look at this map and consider updating. (James Parkin)

QUESTION #31:

If the proponent needs a HADD (Harmful Alteration Disruption and Destruction) permit. I understand that CVC would be the agency to issue it, Is that correct?

Yes, the CVC has a Level 2 agreement with the Department of Fisheries and Oceans (DFO) and under that agreement, we work together to conduct our reviews when a potential for a HADD is identified.

QUESTION #32:

Is there a potential here for CEA to be used.

We would have to wait and see. (Hazel Breton)

SESSION 5 Wrap up and Next Steps

Robb provided a brief wrap-up and reminded people of the following:

1. If you would like to participate in the February 27, 2007 workshop, please fill out the section on the Feedback form and drop it in the box at the back of the room.
2. If you would like a CD/DVD with copies of the CBSES reports, tick the box on the Feedback Form

A draft summary of tonight's forum will be available by February 2, 2007.

A Message from the Coalition...

To the residents who attended the Public Information Meeting Jan 25th held by the Town of Caledon, The Region of Peel, James Dick Construction Ltd (JDCL) and Credit Valley Conservation:

The executive of the Coalition of Concerned Citizens (CCC) has read the summary provided by the facilitator Mr. Robb Ogilvie and would like to add the following comments to the summary.

"The Coalition was given to understand that site-specific questions would be dealt with at a Town of Caledon public meeting – re the CBSES and the Rockfort Quarry application- to be held in January 2008."

The CCC was unaware that questions not pertaining to Part A of the Environmental Study were going to be fielded by the panel. There were a number of answers given by JDCL consultants, with which we do not agree. However, because the meeting was supposed to be focused on Part A of the Broader Environmental Study, the CCC withheld debate on several issues.

The Coalition does not want the public to assume that we agree with many of the answers provided by James Dick's consultants and those issues will be raised later in the process.

If you have any questions, please feel free to contact the Coalition at 905-838-4333.

Questions and comments submitted on "I didn't get a chance to say" forms

I DIDN'T GET A CHANCE TO SAY FORMS

The following questions/comments were submitted. Responses to these questions are still being prepared. The answers will be provided as a supplement to this Summary at the Feb. 27th Objectives Workshop and mailed out to the rest of the participants.

Since processing of minerals produce impact on ground level water with increase of PH, TSS and BOD.

- 1) Has the tests been done to measure those levels until now?
- 2) What are maximum levels of those contaminants allowed. Mg/l
- 3) Who is responsible to implement those standards?
- 4) How in Unesco heritage designated area of Niagara Escarpment the Quarry could be developed?

Who defined the 3 sections of upper, middle and lower regions?

Who was involved in the definition what parties?

What is the definition of the border of the 3 sections, physical items, geographical items

If my water supply (well) becomes deficient, will the Town of Caledon put in a pumping station and connect my property to the municipal water system at no cost to myself, and further more, I expect no future changes for my water usage as it is completely free to me now.

If land values plummet, I expect a large reduction in my property taxes, will this be addressed the report? And what avenues to future compensation will be available to the residents affected by this application regarding area 9A?

I want to be included in the water monitoring program.

The Incorrect # of houses and research represents a lack of social awareness that includes Countryside Neighbourhoods

The cohesiveness of the neighbours here is obviously strong.

Blasting, Crushing, Trucks Banging will no doubt cause valuable livestock to abort. Trucks will dominate what is not a designated haul route!

Fish on Hutchinson's Swale

Figure 2.1 inaccurately defines out property in (open, woodland, pond, residence)

Also 8.1 and 6.4 and possibly more. We have a pond and year round springs.

We would be happy for someone to come and note the changes, we have 2 residences on Side Roads not showing. 9724 and 9728 and both obviously on wells.

The maps/charts and the handouts for the characterization seem to remain in the sils associated with each topic or discipline. I can see no characterization of the 9A landscape as a whole. Given the collections of observations across the topics and disciplines for 9A to date what is the overall importance of the landscape and the natural features, functions and taxa. Is it just a ho hum patch of landscape to be found about anywhere in the GTA or is it exceptionally rare? So what – what does it add up to?

1. Effect of Rockfort Quarry on water supply to wells downstream of groundwater direction per Figure 6.11 within 1.5 Km
2. Quality
3. Quantity
4. Liability for loss of water. Who is liable etc.

1. How can I trust research results initiated and (I assume) paid for by JDCL? Given the likelihood of bias on independent review of the report is required.
2. Since current land use (as described in the study) is incompatible with a mining operation (as proposed by JDCL) why is the quarry being considered? Why should JDCL's economic needs supercede those who precede this company's land purchase.
3. The ecological study falls short of considering the true impact on fauna in the area given the absence of any investigation of the impact of the process (blasting, digging, machinery, trucks) on fauna in the immediate area and on the regional natural corridor.

Part A, Part B, Part C?? OMB??

In reality, no one in the Study Area wants a modification to an area which could someday have an adverse effect on their property or their lifestyles or their futures

Solve the problem quite simply by having a referendum on the matter, then it becomes a binding yes or no.

1. Who chose the firm of Conestoga-Rovers and Associates to be the firm to conduct the study?
2. What other similar quarry operation projects has the firm been involved in and what were the ultimate results for the organization commissioning their involvement?
3. How many employees of James Dick Construction Ltd currently live in the Town of Caledon and how many additional employees will James Dick Construction estimate will hire if he increases his operation, if the Rockfort Quarry is permitted?

When will the Rockfort Quarry application specifically be discussed in public meetings?

1. Why is the 9A deferred?
2. Is the 2007 JDCL report available?
3. In the larger picture – what effect will all this have on the Credit River Ecology?

The question of wells and rivers has been dealt with.

My question is who has chartered the underground rivers?

How are they to be protected?

Bruce Trail crosses at Boston Mills and Mississauga Rd. There will be danger to hikers. What will be done to protect them?

Boston Mills and Mississauga Rd is a dangerous intersection and needs to be upgraded, will it be done?

The Region of Peel will not be allowed to bring in water from the Lake to Greenbelt. Mandate says so, therefore the only water available will be from local areas such as Cheltenham, Terra Cotta well systems. This water should be held in reserve to protect the public.

