

**CORPORATION OF THE CITY OF CAMBRIDGE
HESPELER WEST SUBWATERSHEDS STUDY
WORKING COMMITTEE**

MEETING AGENDA

**Thursday, March 18, 2004
Allan Reuter Seniors Centre, 507 King Street, Cambridge (Preston)
3:30 p.m. to 5:30 p.m.**

1. Introductions
2. Declarations of Pecuniary Interest
3. Confirmation of Minutes (attached)

THAT the Minutes of the Hespeler West Subwatersheds Study Working Committee meeting held March 4, 2004 be considered for errors and/or omissions.

4. Regional Involvement in Watershed Studies and Environmentally Sensitive Policy Areas– Presentation – Chris Gosselin, RMW
5. Revised Floodline Calculations Process To be distributed
6. MGWA Newsletter – Draft Attached
7. Other Business
 - (a) Follow-up List Attached
 - (b) List of Topics for Upcoming Meetings To be distributed

Next Meeting Date – Thursday, April 1, 2004
Allan Reuter Seniors Centre
507 King Street
3:30 to 5:30 p.m.

**CORPORATION OF THE CITY OF CAMBRIDGE
HESPELER WEST SUBWATERSHEDS STUDY WORKING COMMITTEE
MEETING NO. 7
MINUTES**

Thursday, March 4, 2004
Allan Reuter Seniors' Centre, 507 King Street, Cambridge (Preston)

Committee Present: Councillor Rick Cowsill (City) (Chair), Erich Ritzmann (MGWA), Cathy Murphy (MGWA), John Vasiga (MGWA), Tricia Rosa (GRCA), Chris Gosselin (RMOW), Ken Cornelisse (MNR), Wendy Wright (City), April Souwand (City), Charlene Schiedel (MGWA), Ian Rawlings (Large Property Owners)

Others Present: Ron McKittrick (alternate for John Vasiga (MGWA)), Nancy Davy (alternate for Tricia Rosa (GRCA)), Mary Hammer and Don Hammer (landowners)

1. Call to Order

The meeting was called to order at 3:30 p.m. by Rick Cowsill.

2. Declarations of Pecuniary Interest

None

3. Confirmation of Minutes

Moved by Cathy Murphy Seconded by Erich Ritzmann

THAT the Minutes of the Hespeler West Subwatersheds Study Working Committee meeting held February 19, 2004 be amended as follows:

- On Page 1, Ed Hammer Jr. change to Don Hammer
- “cms” change to “m³/s” throughout
- On Page 4, “should be labeled Middle Block Road” change to “should possibly be labeled as Maple Grove Road”
- On Page 4, second paragraph, third sentence, “Erich thought” change to “John thought”

- On Page 4, third paragraph, add after the first sentence, “Erich Ritzmann mentioned that some of the contents of the Smart report suggest that the HWSS was incorrect in the establishment of the northern watershed boundary. The HWSS for subcatchment 2115 assumes a single outlet to the south. Smart identifies two outlets, north and south, favouring a northerly flow. Erich stated that no additional work by the Region is required for this statement to be relevant.”
- On Page 4, at the end of Point 1., add, “Erich Ritzmann identified that the consultant hired by the City for the public meeting on September 25, 2003 in the Beehive Room, Mark Dorfman, was incorrect with respect to the Regulatory Storm Floodline. Wendy Wright confirmed that she knew he was wrong when he stated floodlines are based on the 1:100 Year Storm, instead of the Regional Storm (Hurricane Hazel).”
- On Page 6, in subsection 5.c), change “MGWS library” to “HWSSWC lending library”

And adopted as amended.

CARRIED

Erich Ritzmann clarified that on Page 3 of the minutes, he indicated that the outlet for 2125 contributes 0.65 l/s to Middle Creek (base flow). This is not correct, he should have said, “0.21 l/s”, as the 0.65 l/s is the cumulative contribution, the individual contribution of 2125 is 0.21 l/s.

4. Scheduled Areas – Presentation – Nancy Davy, Senior Resource Planner, GRCA

Nancy Davy gave a presentation on the Conservation Authorities Act and more particularly the Grand River Conservation Authority’s Fill, Construction and Alteration to Waterways Regulation (presentation attached to minutes). There was discussion about the broadness of the definition of a waterway. An example was roadside ditches and how they are looked at by the GRCA. Staff’s working definition of a waterway is that there is a defined bed and banks that conveys the flow of water. The current regulation definition is, “any river, lake, stream or watercourse under the jurisdiction of the Conservation Authority.” This is not a particularly helpful definition. There were questions about when permits in wetlands are required and not required for construction and maintenance of structures like driveways. There was discussion about recycled shingles buried in catchment 2115. The CA has a statute of limitations on their legislation, which makes it difficult to enforce the legislation after time has passed if no evidence was collected at the time. There were questions and concerns about notice requirements when areas are scheduled. It was clarified that just because an area is scheduled, it doesn’t mean that no fill can be placed in these areas, but that a permit is required for this activity by the GRCA.

a) Community Concerns - GRCA "Scheduling"

Following Nancy's presentation, the committee reviewed the community concerns on this topic, with the following results:

1. Yes, scheduling is to regulate fill placement.
2. List of criteria on slide 13 in presentation.
3. Procedure on slide 15 in presentation.
4. Once the new regulation is enacted by the Province, there will be new regulated areas.
5. The HWSS will be one piece of background information to come forward into maps when the new regulation is implemented.
6. The Chilligo area was scheduled in 1975 and the area west and south (Schedule 17) was scheduled in 1993 to control placement of fill.
7. Trying to protect floodplains, steep slopes, watercourses, wetlands, etc. from fill placement where conservation of land is a concern.
8. Scheduled areas could become "unscheduled". They would have to go through the same process an area goes through to be scheduled. Nancy is not aware of this ever happening.
9. One could send a letter in to the GRCA to request a review of a previously scheduled area, but the new process is coming and they would probably be asked to wait for that.
10. The definition of a watercourse was covered in the presentation and this is one of the criteria used for areas to be scheduled.
11. Channel buffers discussion will be held at the same time buffers in general are covered.
12. Yes, fill can be permitted in a scheduled area, depending on the GRCA review. No GRCA permit is required for removal of fill. However, this may need a City grading by-law permit.
13. The GRCA has a review process for permits to place fill.
14. Farmers are treated as any other landowner with respect to fill permits.
15. Driveways and laneways that require fill in a scheduled area need a permit. A right of way is a legal entity, which does not require a permit, but the physical placement of fill would.
16. Yes, the Conservation Authorities Act was amended in 1998 and a new regulation is expected to be enacted in the near future.
17. Notification for Schedule 17 was done through newspaper. As discussed above, areas could be unscheduled, but this has never been done. One would have to request GRCA to embark on a process.
18. Yes, GRCA would schedule a PSW to regulate fill, and also regulates construction in a wetland.
19. Yes, GRCA would schedule a LSW to regulate fill and even wetlands that have not been evaluated by MNR. All wetlands are regulated with respect to construction - doesn't matter if it is not evaluated.

20. No, generally SWM ponds are not scheduled. Development was approved through development approval process, which the GRCA reviews for stormwater management concerns.

In response to further questions, Nancy indicated that permit files are kept by the GRCA. Scheduled areas do not get removed when permits are issued (the line stays). Municipalities are not exempt from CA regulations. Fill in floodplains may be allowed in some circumstances. Cut and fill used to be a standard practice, but is not used as much now to “square off” developments adjacent to the floodplain. The Toyota property has scheduled areas on it and did get a permit when it was developed. Permits are usually good for the time of the construction (generally two to five years). Recent construction at the Toyota site was reviewed by the GRCA through the City’s site plan approval and building permit process. John Vasiga pointed out that at the N/W corner of Fountain and Maple Grove a wetland was recently removed and replaced with a parking lot. Wendy and Nancy will check to see what the approval process was for this and report back. Wendy will check into the Phase 2 development of City’s industrial subdivision where fill appears to have been permitted in the floodplain of Middle Creek and report back. Erich pointed out examples of fill he has noted in the Hespeler West subwatersheds, particularly on the island in the Speed River on the east side of Speedsville Road (Erich will send pictures and staff will report back).

5. On-line Ponds – Presentation - Ken Cornelisse, District Biologist, MNR

Ken Cornelisse gave a presentation on dams and ponds and their impact on watercourses (presentation attached to the minutes). The Ministry of Natural Resources has jurisdiction over dams through the Lakes and Rivers Improvement Act and the Minister can order removal of unsafe dams. Determining who is the owner of dams can be difficult and some are “orphaned” by the demise of the original industrial owners. The use of fish ladders to help fish move upstream around dams was discussed as an imperfect way of mitigating the blockage that dams represent to fish movement. The three streams in the Hespeler West Subwatersheds Study had portions identified as coolwater. The wetland evaluation scored this wetland as contributing to a commercial fishery. This is because the entire area is under a bait harvester’s license, allowing them to fish in these areas. Questions arising from this presentation will be added to the follow-up list.

6. Other Business

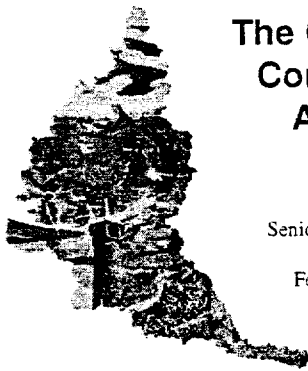
- a) Follow-up List.
- b) List of Topics for Upcoming Meetings – was discussed and will be firmed up at the next meeting, with some discussion beforehand.

- c) Arriscraft International Inc., Revision to Aggregate Extraction License No. 46162, Briardean Road – Information Report No. PI-24-04. Ron McKitrick questioned what the opportunities for public input were. He was told that the application is to MNR to increase the tonnage removed in a year. Nothing else is changing with respect to the pit license.
- d) 1922 Freund Drain – Petition for Drainage Works and Appoint a Drainage Engineer – Report No. TPW-06/04. Ken Cornelisse asked how agencies would have input to this. He was advised to contact Miron Docev, Project Engineer at the City.

John Vasiga motioned to adjourn.

Meeting adjourned at 5:47 p.m.


Next meeting – Allan Reuter Seniors' Centre – 3:30 to 5:30 pm, Mar. 18, 2004



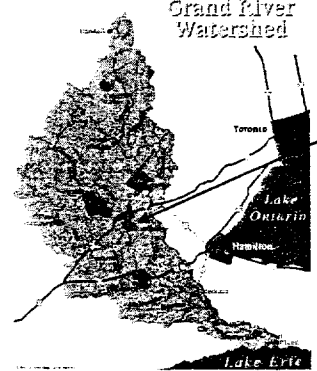
**The Grand River
Conservation
Authority**

Nancy Davy
Senior Resource Planner

February 19, 2004



The
Grand River
Watershed




Toronto

City of
Cambridge

Lake
Ontario


Hamilton

Lake Erie



Legislation

- Conservation Authorities Act (1946)
- Conservation Authorities Act amended in 1998



Implementation Tools

Regulation - Conservation Authorities Act

- Section 28 of the Conservation Authorities Act
 - Regulations in place April 1962 - Known as the Fill, Construction and Alteration to Waterways Regulations (GRCA permit) - Regulation currently under review due to changes in CA Act.

- GRCA Board is approval authority for these permits

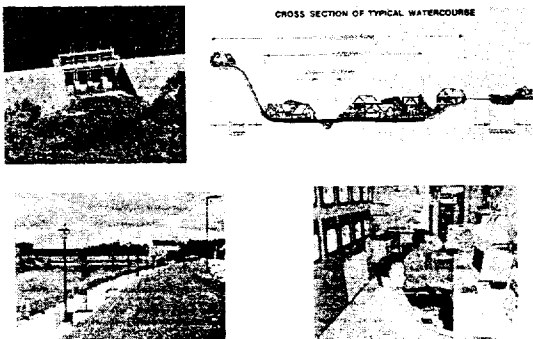


Conservation Authority Regulations

- GRCA "Fill, Construction and Alteration to Waterways Regulations" permit required for:
 1. Construction in an area susceptible to flooding
 2. Construction in a wetland
 3. Alteration of a watercourse
 4. Placement of fill in a Scheduled Area (mapped area)



Flood Plain



Alteration to Waterways

➤ Regulation identifies the straightening, changing, diverting or interfering in any way with the existing channel of a river, creek, stream, or watercourse as a regulated activity



Wetlands

➤ Current Regulation identifies a permit is required for construction in a wetland



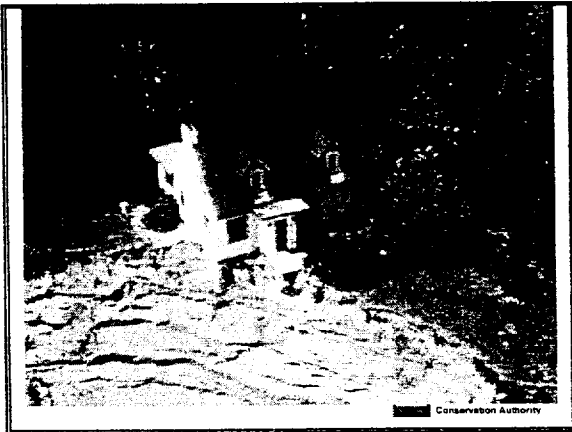


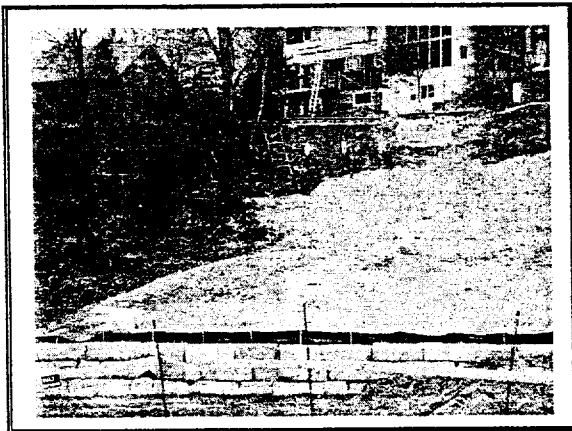
Scheduled Areas

- > Regulate:
 - > placement of fill material in defined areas where conservation of land is of concern

- > Defined on mapping approved by the Province







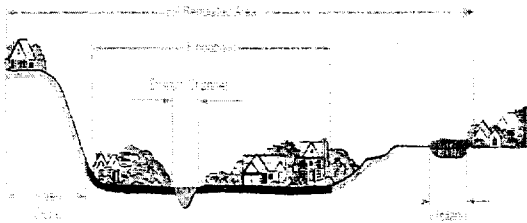
Process - Scheduled Areas

- Criteria for mapping for Schedule 17
 - Floodplain
 - Wetlands (all wetlands)
 - Pollution Susceptibility – eg. Poorly Drained soils eg. High water table/organic soil, Shallow soils over bedrock
 - Steep slopes
 - Ponds/Lakes
 - Watercourses
 - Conservation of lands which have inherent limitations to use eg. where placement of fill may adversely affect the environmental resource
 - Urban development may be excluded (eg. House, SWM pond)



What We Regulate

CROSS SECTION OF TYPICAL WATERCOURSE



Process - Scheduled Areas

- Current Process
 - Criteria for mapping (approved by MNR)
 - Public meeting
 - Site visits when requested
 - Municipal Council resolution
 - GRCA Board meeting
 - Approved by Province and published in Ontario Gazette

Appeals would be through GRCA Board and/or MNR



Process - Scheduled Areas in HWSS

- > Chillico Creek – Schedule 10
Approved by GRCA January 9, 1975
Approved by Province - Ontario Regulation 356/74 as amended (February 19, 1975)
- > Grand River/Speed River – Schedule 17
Public Meeting – October 6th, 1993
Approved by Cambridge Council – October 25, 1993
Approved by GRCA Board - November 25, 1993
Approved by Province – through Ontario Regulation 149/90 as amended by 69/93



Process - Scheduled Areas

- > Amending a Scheduled Area
To 'un-schedule' or amend a scheduled area it is the same process as creating a new scheduled area
- Driveways - Scheduled Area
Driveways etc. are included if it is within one of the areas in criteria eg.
Floodplain - maintenance and use can continue
- > Agricultural uses
No restrictions on existing uses - expansions etc. would be considered in conjunction with potential impacts on regulated area



Process - Scheduled Areas

- > Generic Regulation
Changes in CA Act in 1998 – Generic Regulation will be for all CA's regulations
Regulated areas are defined in the CA Act. Definitions of the regulated areas can be shown on maps. The mapping process is being determined through implementation guidelines
HWSS would provide technical information and would be used to create regulated area mapping.
Public meeting required



How the GRCA permit process works:

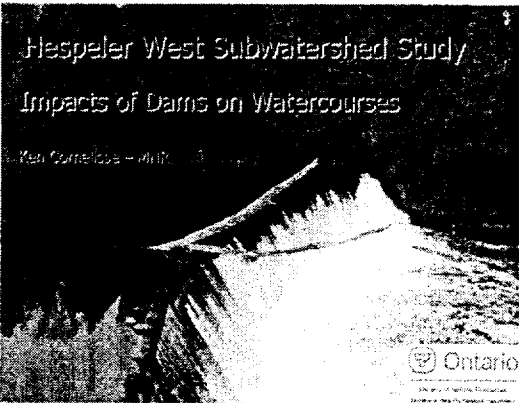
- > GRCA permit application – for GRCA approval
 - > Plans, supporting report(s) and fee
- > Review supporting studies eg. Floodplain analysis, EIS etc.
- > Conformance with GRCA policies
- > If a building permit is required, GRCA permit must be obtained prior to issuance of the building permit
- > Violation
- > Appeal Process



Questions?



Hespeler West Subwatershed Study
Impacts of Dams on Watercourses
 Ken Cornelisse - author



Ontario
 Ministry of Natural Resources
 Environment and Heritage

Ecology of Running Water (Hynes, 1970)

Headwaters

- highly variable flow (may dry up)
- energy from organic inputs
- temperature variable and/or groundwater

Fishes evolved to these conditions

- small
- rapid growth
- early maturity
- tolerant species


Ecology of Running Water (Hynes, 1970)

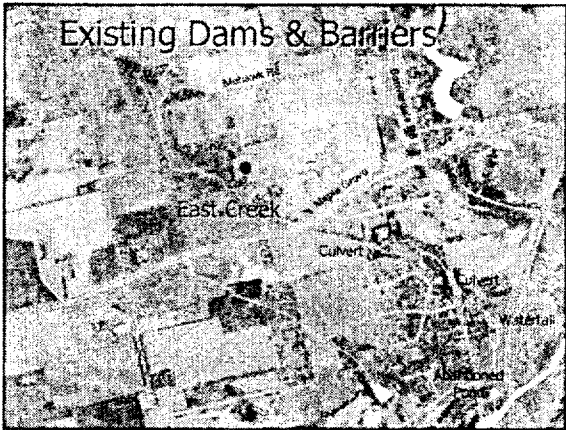
Large Rivers

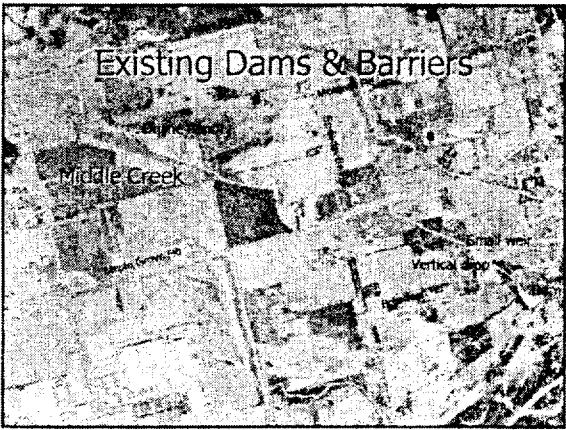
- much more constant flow (seldom dry-up)
- energy from the sun
- temperature less variable

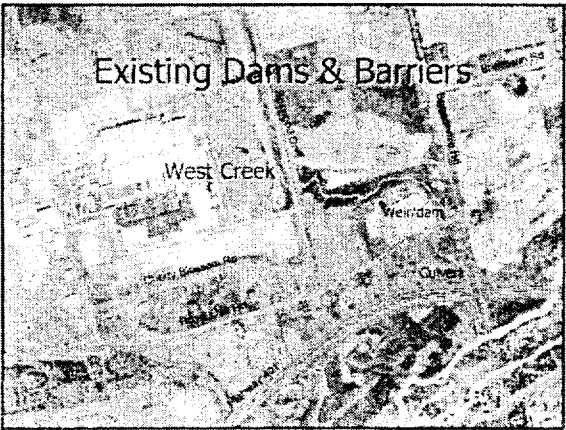
Fishes evolved to these conditions

- larger
- slower growth
- later maturity
- sensitive species









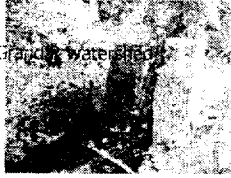
Dams

Dam Removal Success Stories (1999)

- In the past 100 years, N. America has lead the world in dam building
- U.S. Army Corps of Engineers catalogued approx. 75,000 dams in the U.S. >6' tall
- Others estimate >2.5 million dams in the U.S.

Grand River

- Estimated to be 130 dams in the Grand River watershed
- GRCA Operates 32 of them



Dams

Purposes

- Hydro power
- Irrigation
- Flood protection
- Flow augmentation
- Municipal water supply
- Navigation / transportation

Many Dams built 50 to 100 years ago

- Life expectancy of 50 yrs
- No longer original purpose
- Aging – removal option (environmental, costs, safety, etc)

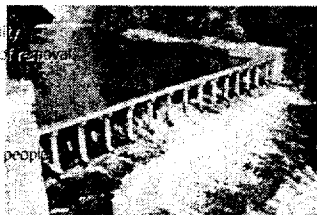
Dams

Many Dams built 50 to 100 years ago

- No longer original purpose

Dams are Aging – Removal Option

- Economic
 - Long term financial liability
 - Costs of repair vs costs of removal
- Safety
 - Structural integrity
 - Downstream property & people



Significant Environmental Impacts

- Blocking sediment transport
 - Fluvial geomorphology
 - Dynamic equilibrium
 - Sediment balance
- Obstructing the movement of woody materials & nutrients
 - Energy flow in streams
 - Dam ponds fill-up with materials over time
 - Impacts on water quality – dissolved oxygen, phosphorus
- Blocking upstream & downstream fish passage
 - Change in fish habitat from stream to pond
 - Fish cannot move upstream, may move downstream
 - No opportunities for re-colonization if local extinction

Significant Environmental Impacts

- Altering water temperatures
 - Increases surface area exposed to sun
 - Substrate (mud) poor in invertebrates compared to running waters
 - Coolwater indicators - Central mud minnow, brassy minnow, N. redbelly dace = groundwater
 - Cool water habitat indicators in all 3 streams
 - Locations E1, E2, M1, M2, M4, W1
- Negative impacts on the aesthetics and character of a natural setting

Legislation Affecting Dams

- Grand River Fisheries Management Plan
- Lakes & Rivers Improvement Act – MNR
- Alteration of a Watercourse – GRCA
- Fisheries Act – DFO
- Navigable Waters Protection Act – Canada Coast Guard

Since the last public meeting at the Beehive Room, your standing committee has been working with representatives of City Council and the administration. This newsletter is being published to bring our supporters up to date on our activities.

You may recall that in response to our suggestion, Cambridge Council established a Working Committee to review the specific areas of community concern and report to Council. The members of this Committee include:

- Ward Councillor, Rick Cowsill, Chairman
- Erich Ritzmann, MGWA
- Charlene Schiedel, MGWA
- John Vasiga, MGWA
- Cathy Murphy, MGWA
- Ron McKitrick, MGWA alternate
- Brian Cunningham, Small Property Owners
- Matt Pugliese, Small Property alternate
- Ian Rawlings, Large Property/Developers
- Ken Cornelisse, Ontario Ministry of Natural Resources (MNR)
- Tricia Rosa, Grand River Conservation Authority (GRCA)
- Chris Gosselin, Regional Municipality of Waterloo (RMOW)
- Wendy Wright, City of Cambridge Commissioner of Planning Services
- April Souwand, City of Cambridge Senior Environmental Planner

The Working Committee meets the first and third Thursdays of the month and the MGWA Steering Committee meets the other alternate Thursdays.

Summary of accomplishments thus far, are:

- Finalizing the mandate, legal requirements and operating rules for the Working Committee.
- Presentations by the Provincial Ministry of Natural Resources and the Grand River Conservation Authority regarding Provincially Significant Wetlands, Floodline Calculations, Regulated Areas and Ponds.
- Review of policies of the various organizations involved.
- Review of technologies involved.
- Agreement on the strengths and limitations of the technologies used.
- Agreement on alteration of several results of the Study.

Next steps are a presentation by the Region regarding Environmentally Sensitive Policy Areas and by the City on Protection of Natural Areas.

Review and discussion of the concerns of the Association has occurred following each of the presentations and changes have been made regarding the results of the Study. Some field visits are planned mid-May.

The presentation from Gus Rungis from the GRCA has confirmed that the HWSS had, in fact, used a "regional storm" model which experts estimate might recur in a two to five hundred year interval. This corrects information presented at the public meeting that the floodplain analysis was based on the hundred year storm – that is the storm that might on average occur once every century.

In February, the HWSS WC reviewed the culvert sizes used in the floodplain modeling and found that every one examined had errors. The City has asked the consultant to correct the information and prepare revised floodlines. The subwatershed boundary of Middle Creek is also being corrected in the area north of Middleblock Road and west of Fountain Street.

The MGWA is currently working with the Ontario MNR to correct the boundaries of the wetlands. Certain wetland classifications on areas that were not really wetlands were removed. Some wetland boundaries were adjusted to more accurately reflect reality.

Wetlands preservation is important for flood prevention, for groundwater quality, as well as for ecological preservation. Moreover, it is important that these features be accurately reflected in the City's inventory, as they are then used to place land use restrictions on your properties.

Concerns expressed by property owners yet to be addressed, among others, include buffers and the enhancement/stewardship areas. If the errors identified by representatives of the MGWA and acknowledged in the Working Committee of the HWSS are adopted or corrected, these items should have an impact on the outcomes and the recommendations. MGWA members, Councillor Cowsill and staff of the City, Region, GRCA and MNR have been working in a cooperative manner, and overall, we are cautiously optimistic that we will be making substantial progress in the near future.

Several have indicated that you would like to follow our progress in more detail and so we have been making an extra effort to ensure detailed minutes are produced for each meeting. You may find the HWSS WC agendas and minutes posted on the City's web site at:

<http://www.city.cambridge.on.ca/section.php?sid=25>

**CITY OF CAMBRIDGE
 HESPELER WEST SUBWATERSHEDS STUDY WORKING COMMITTEE
 FOLLOW-UP LIST**

SOURCE/ MEETING DATE	ITEM	ASSIGNED TO	COMMENTS	DUE DATE	DONE
HWSSWG Oct. 30/03	Provide full hard copy versions of the HWSS to working committee	April Souwand	Nov. 2003 version to be distributed as soon as it is available from PEIL	Nov. 2003	<input checked="" type="checkbox"/>
HWSSWG Oct. 30/03	Finalize Terms of Reference: <i>Section 7 Time Frame and Work Plan</i> - process for review of community concerns - meetings with individual property owners - review of revised report <i>Section 8 Public Consultation/Information</i> <i>Section 12 Dispute Resolution</i>	Wendy Wright	Wording to be revised based on discussion at meeting	Nov. 19, 2003	<input checked="" type="checkbox"/>
HWSSWG Oct. 30/03	Choose representative of small property owners	Wendy Wright and Erich Ritzmann	Choose someone who is not represented by MGWA	Nov. 19, 2003	<input checked="" type="checkbox"/>

Follow-up List
City of Cambridge
Hespeler West Subwatersheds Study Working Committee

SOURCE/ MEETING DATE	ITEM	ASSIGNED TO	COMMENTS	DUE DATE	DONE
HWSSWG Oct. 30/03	Provide name of an alternative representative to committee	Each committee member	An alternative is necessary in cases where member is not able to attend meeting	Nov. 19, 2003	<input checked="" type="checkbox"/>
HWSSWG Oct. 30/03	Process for review of community concerns	Wendy Wright	Item for discussion on Nov. 19, 2003 Review draft with MGWA – Approved per memo dated Nov. 19, 2003	Nov. 19, 2003	<input checked="" type="checkbox"/>
HWSSWG Oct. 30/03	Provide list of people wanting site visits	MGWA/City	City has provided MGWA will provide, if needed	Nov. 19, 2003	<input checked="" type="checkbox"/>
HWSSWG Oct. 30/03	Produce a map of property owners in the study area	April Souwand	Map will be used to keep track of site visits	Nov. 19, 2003	<input checked="" type="checkbox"/>
HWSSWG Oct. 30/03	Invite City Clerk to next meeting to discuss pecuniary interest	April Souwand	City Clerk attended meeting	Nov. 19, 2003	<input checked="" type="checkbox"/>
HWSSWG Oct. 30/03	Produce list of previous studies done in HWSS	April Souwand	Examples are Cambridge Business Park Stormwater Management Report	Nov. 19, 2003	<input checked="" type="checkbox"/>
HWSSWG Oct. 30/03	Develop media protocol	April Souwand	See Pesticides Working Group Protocol	Nov. 19, 2003	<input checked="" type="checkbox"/>

Follow-up List
City of Cambridge
Hespeler West Subwatersheds Study Working Committee

SOURCE/ MEETING DATE	ITEM	ASSIGNED TO	COMMENTS	DUE DATE	DONE
HWSSWG Oct. 30/03	Schedule of Meetings	April Souwand	Next committee meeting	Nov. 19, 2003	<input checked="" type="checkbox"/>
HWSSWG Nov. 19/03	Updated List of Members and Alternates	April Souwand		Dec. 18, 2003	<input checked="" type="checkbox"/>
HWSSWG Nov. 19/03	Establish a Lending Library of Reports	April Souwand		Dec. 1, 2003	<input checked="" type="checkbox"/>
HWSSWG Nov. 19/03	Add media protocol to Terms of Reference	Wendy Wright	See Revised Terms of Reference	Dec. 18, 2003	<input checked="" type="checkbox"/>
HWSSWG Nov. 19/03	Invite Ken Cornelisse to present Wetland Evaluation and Classification info.	April Souwand		Dec. 18, 2003	<input checked="" type="checkbox"/>
HWSSWG Nov. 19/03	Inquire into using City's website to distribute agendas	Wendy Wright/ April Souwand	Will continue to send .pdf files by e- mail due to administrative difficulties	Dec. 18, 2003	<input checked="" type="checkbox"/>
HWSSWG Nov. 19/03	Terms of Reference Section 7.3 – Review of Specific Areas of Community Concern	Wendy Wright	Review following Presentation/ Discussion of Provincially Significant Wetlands		

Follow-up List
City of Cambridge
Hespeler West Subwatersheds Study Working Committee

SOURCE/ MEETING DATE	ITEM	ASSIGNED TO	COMMENTS	DUE DATE	DONE
HWSSWC Jan. 15/04	Provide a map of Scheduled Areas to MGWA	Nancy Davy	May be followed up with a presentation on the Conservation Authority's Fill, Construction and Alteration to Waterways Regulation	Feb. 5/04	<input checked="" type="checkbox"/>
HWSSWC Jan. 15/04	Refine wetland evaluation mapping for PSW	Ken Cornelisse	Some areas require site visit in spring to make a final determination. Four additional areas identified by MGWA will also be looked at for any changes needed.	Spring 2004	
HWSSWC Feb. 5/04	Provide reference from HWSS to the fact that floodline determination was based on full development scenario.	April Souwand	Memo to Committee	Feb. 19/04	<input checked="" type="checkbox"/>
HWSSWC Feb. 19/04	Report on floodplain determination.	Wendy Wright	Memo to Committee	Mar. 18/04	
HWSSWC Feb. 19/04	Subcatchments 2115, 2120 and 2125 boundary revisions	Wendy Wright	Review as part of Floodline recalculation		

Follow-up List
City of Cambridge
Hespeler West Subwatersheds Study Working Committee

SOURCE/ MEETING DATE	ITEM	ASSIGNED TO	COMMENTS	DUE DATE	DONE
HWSSWC Mar. 4/04	Discussion on channel buffers	April Souwand Nancy Davy	Deferred to discussion on buffers in general		
HWSSWC Mar. 4/04	Placement of Fill on NW corner of Fountain and Maple Grove to build a parking lot (Toyota?)	Wendy Wright Nancy Davy	Check the approval process for this		
HWSSWC Mar. 4/04	Fill placement in floodplain of Middle Creek for City Industrial Subdivision Phase II	Wendy Wright	Check the approval process for site servicing by the City of Cambridge		
HWSSWC Mar. 4/04	Fill placement on island in Speed River, east of Speedville Road bridge.	Nancy Davy	Check whether GRCA is aware of this and if it is a regulated activity.		
HWSSWC Mar. 4/04	Questions arising from Ken Cornelisse's presentation on dams and ponds.	MGWA	Compose a list of questions for Ken.		
HWSSWC Mar. 4/04	Update List of Topics for Upcoming Meetings	Wendy Wright	Update list after discussion with MGWA	Mar. 18/04	



The Corporation
of the City
of Cambridge

MEMORANDUM

To: Hespeler West Subwatersheds Study
Working Committee

Date: March 17, 2004

From: Wendy Wright
Commissioner of Planning Services

Our File: D03.01.09.01

Your File:

Re: Additional Agenda Item – March 18, 2004

5. Revised Floodline Calculations Process

Attached



MEMORANDUM

To: Hespeler West Subwatersheds Study
Working Committee

Date: March 17, 2004

From: Wendy Wright,
Commissioner of Planning Services

Our File:

Your File:

Re: Revised Floodplain Calculations Process

The comments provided by the MGWA at the February 19, 2004 meeting revealed errors in the data used for calculating the Regulatory Storm floodline for West, Middle and East Creeks.

I have reviewed and discussed several options with Councillor Cowsill, Cambridge Solicitor, Cambridge staff, GRCA staff, MGWA members and PEIL. My objectives are to complete the study in a timely manner and to have confidence in the calculated floodline and the final report.

The following steps need to occur:

1. PEIL to review inputs and explain data errors;
2. PEIL to correct data inputs into the HEC-RAS model and re-run floodplain calculations to correct results in Section B November 2003 Report and Appendices D and E;
3. Data inputs and results to be checked by a water resources engineer hired to assist GRCA in completing a detailed review including verification of model inputs (i.e. field review);
4. Water resources engineer to run additional scenarios to address issues raised by the HWSSWC relating to Subcatchment Areas 2115, 2120 and 2125, as follows:

- | | |
|----------------|---|
| Scenario (i) | Removal of Subcatchment Area 2120 from Subwatersheds Areas; |
| Scenario (ii) | Model diversion of baseflow from 2125 to Freeport Creek with major flows to Middle Creek (existing conditions); |
| Scenario (iii) | Review revisions to boundary of 2115 based on more detailed information from Smart report and MTE report (existing conditions); |
| Scenario (iv) | Removal of Subcatchment Areas 2115 and 2120; |
| Scenario (v) | Removal of Subcatchment Areas 2125 and 2120; and |
| Scenario (vi) | Removal of Subcatchment Areas 2115, 2125 and 2120. |

Assumptions for:

Subcatchment Area 2120 – Remove from Subwatershed as the remedial work will be completed Spring 2004 for area to contribute to Randall Drain.

Subcatchment Area 2115 – Await findings of engineer reviewing Freund Drain and/or implementation of results. In the interim, run both options in the model for floodline calculations on Middle Creek, using revised boundary if necessary from Smart report.

Subcatchment Area 2125 – Await findings of Freeport Creek Class EA 2007. In the interim, run both options in the model for floodline calculations on Middle Creek (i.e. worst case scenario). Also, model existing condition with diversion to Freeport Creek.

5. The water resources engineer would be hired by the GRCA and work under the direction of Gus Rungis of the GRCA. The engineer would prepare an Addendum to the Hespeler West Subwatersheds Study reflecting the four scenarios.
6. The Addendum would be reviewed by the HWSS Steering Committee and provided to the HWSS Working Committee for comment and information.

WW/jg



Wendy Wright.