



The Mining and Lands Commissioner Le Commissaire aux mines et aux terres

File No. CA 008-10

H.D. Sutter)
Deputy Mining and Lands Commissioner)

Thursday, the 20th day
of December, 2012.

THE CONSERVATION AUTHORITIES ACT

IN THE MATTER OF

An appeal to the Minister of Natural Resources under subsection 28(15) of the **Conservation Authorities Act** against the refusal to grant permission for development within a Regulated Area of the Etobicoke Creek watershed and for the recognition of the recent placement of 10,360 cubic metres of fill at the property municipally known as 7080 Dixie Road, City of Mississauga, Province of Ontario;

AND IN THE MATTER OF

Ontario Regulation 166/06.

BETWEEN:

ONTARIO KHALSA DARBAR INC.
Appellant

- and -

TORONTO AND REGION CONSERVATION AUTHORITY
Respondent

ORDER

WHEREAS THIS APPEAL to the Minister of Natural Resources was received by the Mining and Lands Commissioner (“the tribunal”) on the 4th day of November, 2010, having been assigned to the tribunal by virtue of Ontario Regulation 571/00;

AND WHEREAS a hearing was held in this matter on the 3rd and 4th days of April, 2012, in the courtroom of this tribunal, in the city of Toronto, Province of Ontario;

1. **IT IS ORDERED** that this appeal be and is hereby dismissed.

2. **IT IS FURTHER DIRECTED** that the respondent file two copies with the tribunal and serve one copy on the appellant, no later than the 31st day of January, 2013, of the respondent's submission on costs.

3. **IT IS FURTHER DIRECTED** that the appellant file two copies with the tribunal and serve one copy on the respondent, no later than the 15th day of February, 2013, of the appellant's response to the submission of counsel for the respondent on costs.

Reasons for this Order are attached.

DATED this 20th day of December, 2012.

Original signed by H.D. Sutter

H. Dianne Sutter
DEPUTY MINING AND LANDS COMMISSIONER



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B E T W E E N:

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Respondent

REASONS and FINDINGS

Appearances:

Mr. John L. O’Kane: Counsel, on behalf of the appellant
Mr. Jonathan H. Wigley: Counsel, on behalf of the respondent

Witnesses for the Appellant

Mr. Amanpreet Bal Member, Ontario Khalsa Darbar Inc.
Mr. Mahadeo Singh President, MPS Engineering Ltd;

Witnesses for the Respondent

Quentin Hanchard, P.Eng., MLA Manager, Development Planning & Regulation
Toronto and Region Conservation Authority (TRCA)
Laurian M. Farrell, P.Eng., MLA Manager, Water Resources Engineering & Waste
Management, TRCA

The matter was heard in the courtroom of the Mining and Lands Commissioner, 700 Bay Street, 24th Floor, in the City of Toronto, in the Province of Ontario on Tuesday, April 3 and Wednesday, April 4, 2012.

The Deputy Commissioner noted that she had visited the site of the subject property on Sunday, March 25, 2012.

INTRODUCTION

This appeal came before the Mining and Lands Commissioner pursuant to subsection 28(15) of the **Conservation Authorities Act**, R.S.O. 1990, c. C. 27, as amended, against the refusal by the Toronto and Region Conservation Authority (TRCA) to grant permission for development within a Regulated area of the Etobicoke Creek watershed and for the recent placement of 10,360 cubic metres of fill on the property described as 7080 Dixie Road in the City of Mississauga in the Province of Ontario.

Subsection 28(15) of the **Conservation Authorities Act** (the **Act**) states that:

“A person who has been refused permission or who objects to conditions imposed on a permission may, within 30 days of receiving the reasons under subsection (14), appeal to the Minister who may (a) refuse the appeal or (b) grant the permission with or without conditions.”

It appears that the proper procedure was followed by the Ontario Khalsa Darbar Inc. (OKDI) in filing this appeal with the Minister of Natural Resources.

The Mining and Lands Commissioner and the Deputy Mining and Lands Commissioners have been assigned the authoritative powers and duties to hear this appeal pursuant to subsection 6(1) and clause 6(6)(b) of the **Ministry of Natural Resources Act**, R.S.O. 1990, c. M. 31, as amended, and Ontario Regulation 571/00. In addition, the principles outlined in the **Statutory Powers Procedure Act** apply to the hearing.

By virtue of subsection 6(7) of the **Ministry of Natural Resources Act**, the proceedings are governed by Part VI of the **Mining Act** with necessary modifications. Pursuant to section 113(a) of the **Mining Act**, these proceedings are considered to be a hearing *de novo*. The tribunal stressed this point at the commencement of the hearing and noted that the purpose of the proceedings was to hear all of the evidence in order to make a fair and independent judgment regarding the appeal.

BACKGROUND

The respondent’s Counsel, Mr. Jonathan Wigley, provided a brief summary of the purpose of this Hearing.

The OKDI deposited approximately 10,360 cubic metres of fill in the flood plain, located on their property at 7080 Dixie Road, in the City of Mississauga, Province of Ontario, in 2009. The TRCA issued a violation notice and laid a charge for failing to secure the required approval and permit for such ‘development’. The subsequent hearing in the Criminal Division of

the Ontario Superior Court of Justice (OSJC) resulted in a conviction. No sentence was imposed at that time and it appears that the sentence depends on the result of this hearing before the Mining and Lands Commissioner.

The fill was placed by the OKDI in the floodplain of the Etobicoke Creek for the purpose of improving a soccer field utilized by the OKDI members. The OKDI submitted an application to the TRCA requesting that they be given a permit to allow the fill to remain in place.

The Conservation Authority's position is that the fill constitutes an interference with the control of flooding due to the loss of storage capacity, which could lead to a higher flood level in the area, both upstream and downstream. The matter of pollution also may constitute an issue for the TRCA. Whether the fill will be removed, which is the preference of the TRCA, will be up to the Court (OSJC).

ISSUES

1. What is the relevance of the Provincial Policy Statement (2005), the Regulations and any approved Policies and Programs of the Conservation Authority?
2. Is there valid evidence that 'cut and fill' operations took place in and near the OKDI lands, sufficient to produce a net gain in storage capacity in the Etobicoke Creek valley?
3. Were the appropriate flow figures and other data utilized by the Appellant in preparing the report regarding flood storage?
4. What is the impact of the TRCA Policy document on the tribunal's decision?
5. Would an approval create a negative precedent for the TRCA and other Conservation Authorities?

EVIDENCE

Mr. John O'Kane, Counsel for the Appellant, agreed that Ontario Regulation 166/06 generally prohibits development within the floodway/valley of the Etobicoke Creek. This Regulation was adopted by the TRCA under the terms of the **Act**. Section 3 of Ontario Regulation 166/06 gives the TRCA the discretion to grant permission for development, which in this case, consists of the placement of fill in the floodplain, if the Authority is of the opinion that the impact might be minor.

Mr. O'Kane continued by listing certain facts regarding the property, the OKDI and the issue of the fill:

- The OKDI is a not-for-profit corporation located in the City of Mississauga within the Etobicoke Creek watershed and is the largest Sikh congregation in Canada;

- The OKDI is operated by a volunteer Board of Directors;
- The OKDI operates a temple or a gurdwara on the site providing many kinds of activities and services for its membership and the community at large;
- The OKDI placed the fill on an existing sports field, located in the floodplain of the property, to a depth of .85 metres (2¾ feet), leveled the fill and installed sod on the site – all carried out without a permit from the TRCA.
- A charge was laid by the TRCA in the Criminal Division of the OSCJ and subsequent to the OKDI having pled guilty to the charge, a conviction resulted. Sentencing has been delayed, awaiting the tribunal's decision.

Amanpreet Bal, a member of the Sikh Temple, gave evidence about the purpose of the Temple and the services it provides in the immediate area and in the western part of the Greater Toronto Area (GTA). The present temple was built in 1989 with additions constructed in the mid 1990's.

The development of the sports field began in the mid 1990's, but the fill at issue, was placed on the sports field in 2009 in order to improve the playing conditions for the users. The ground was uneven and this led to players tripping during the games, which, in some cases, led to injuries. The need to improve the ground was inspired by both the children who were playing and by their parents. Many volunteers actually carried out the work.

Mr. Bal indicated that no other solution was considered to solve the problem of the uneven ground, such as leveling and rolling the field. He was aware that dump trucks brought the soil to the OKDI property. The respondent (Mr. Wigley) submitted that the amount of fill deposited would have been equivalent to 1200-1300 truckloads. Mr. Bal thought that some fill came from the property itself, but otherwise, he did not know the source for the soil and thus had no knowledge of any testing that might have been done regarding potential contaminants. He did not know who organized all of this activity but stressed that it was done by volunteers who may or may not have had the necessary skills needed to carry out the development. Mr. Bal stated he only fulfilled the role for which he had volunteered.

Mr. Bal was not able to confirm whether the OKDI Board of Directors gave approval for the improvements to the sports field. Actually, no evidence was provided regarding this point. Mr. Bal was also not privy to any information with regards to any previous infractions on the OKDI property.

Exhibit No. 5A and 5B were submitted by the TRCA. They consisted of two colour photographs showing the fill operation on the sports field at the time that the TRCA Enforcement Officer discovered the permit violation. The Enforcement Officer took these photographs and marked them as taken on October 13, 2009.

Mr. Mahadeo Singh was the second witness for the Appellant. Mr. Singh is a licensed professional engineer in the Province of Ontario. He is the President of MPS Engineering Ltd; but had previously been employed by the Regional Municipality of York (Exhibit 2 – Tab 1) as the Manager of Servicing Approvals. He stated that his specific discipline was municipal engineering and he was qualified to give expert evidence regarding cut and fill calculations and flood storage capacity. After some questioning by Mr. Wigley as to his specific

experience in cut and fill exercises within floodplains themselves and after providing three examples in response, Mr. Singh was accepted and qualified as a witness to provide expert evidence.

Mr. Singh referenced Exhibit 4a, entitled 'Volume Summary', indicating that the OKDI owns approximately sixteen (16) hectares or forty (40) acres of land in the area of Dixie Road and Derry Road in the City of Mississauga. The Etobicoke Creek traverses the site from the northwest, flowing southeast under a bridge on Dixie Road, just north of the entrance to the OKDI property and the Temple building. About 60% of the property is tableland, while 40% lies within the TRCA Regulated Area. The sports field is on the south side of the Etobicoke Creek valley. Several municipal parks are located to the east, north and west of the property, along with some commercial parking lots.

Mr. Singh indicated that he had not had any involvement with the OKDI when the actual fill placement occurred in 2009. Since then, he has assisted in preparing the application to the TRCA to retain the fill. This application was made in late 2009.

Exhibit 2 - Tab 9 consists of a series of maps dealing with the floodplain mapping program undertaken by the TRCA in 1975 and 2005. Sheet 20 provides the 1975 mapping while a revised Sheet 20 shows the 2005 mapping, which had not been approved at the time of Mr. Singh's assessment. (Exhibit 11)

Mr. Singh indicated that the 1976 floodplain mapping was the only 'official' mapping available to him at the time of the application. He did acknowledge that he had been made aware of the 2005 draft mapping by the TRCA staff, but he used the approved mapping - the 1976 mapping - in carrying out his assessment.

With reference to Exhibit 4a, Mr. Singh indicated the location of the fill area (soccer field) and the area of the 'driveway component' outside the sports field area. Mr. Singh agreed that the depth of the deposited fill was .85 metres (2.75 feet) consisting of 10,360 cubic metres. He understood that the TRCA's major concern regarding this fill has been the potential flooding, the reduced amount of storage area and the impact this would have on the watershed itself. Mr. Singh's evidence with regards to impact consisted of a series of calculations on the potential loss of flood storage capacity as a result of the fill. Since the original report that was submitted to the TRCA as part of the fill retention application, Mr. Singh has revised some of his findings regarding the cut and fill aspect of the application.

He indicated that he had discovered another area where cut and fill had occurred. This area was referred to as the 'driveway entrance' providing access from Dixie Road. It was Mr. Singh's understanding that this driveway, now an improved signalized intersection, originally gave access to the OKDI property when it was used for agriculture and provided the legal access when the land was purchased by the OKDI.

Mr. Singh indicated that the OKDI had informed him that they had removed fill in this area in order to create an acceptable access to the Temple building. It was noted that the area was also located in the TRCA's Regulated area, but no application had been made to the TRCA for a permit.

Mr. Singh carried out a comparison calculation study between the 1976 and the 2005 flood line mapping of the area described as the 'driveway entrance'. He referenced Exhibits 4b showing the Volume for Construction of Driveway and Soccer Field, while Exhibit 4c shows only the Volume for Construction of Driveway from Dixie Road. This comparison separated the calculations for the two areas being referenced.

Cross sections were produced, using both manual and AutoCAD processes, to determine the difference between the 1976 mapping and the 2005 mapping. This work allowed Mr. Singh to determine the net gain or loss of storage capacity. He maintained that he had found a gain in storage, in the amount of 22,872 cubic metres (volume) in the two areas described in Exhibit 4b, between 1976 and 2005.

Mr. Singh was involved with the 1996 OKDI request to expand the temple building and the parking lot. Further, he was involved with the engineering of the stream bank rehabilitation project in 2005. The stream bank in the area had eroded to the point where it was almost vertical. In order to secure a permit to complete the parking lot expansion as well as in response to a violation notice, the OKDI was required to stabilize the stream bank by creating a 2 to 1 slope. Mr. Singh indicated that this work was done, fulfilling all the technical engineering requirements of the TRCA. (See Exhibit 2 - Tab 7).

Mr. Singh maintained that as a result of the stream bank work, there was also a net gain in storage volume in this area. Approximately 2000 cubic metres of soil were removed from the bank area of the floodplain, resulting in this net gain. Exhibit 4a refers to an 'Area of Excavation for stream bank rehab works'. It is referred to as 'Channel Rehabilitation' in the Volume Summary on Exhibit 4a and indicates a gain of approximately 1900 cubic metres. The following chart summarizes Mr. Singh's submission with regards to the net gain achieved from the three projects.

VOLUME SUMMARY			
(according to Mr. M. Singh in Exhibit 4a)			
	Fill Removed	Fill Added	Gain
Driveway Entrance*	?	-	6993 m³
Soccer Field*	?	10,300 m³	5579 m³
Stream Bank Restoration	2000 m³		1900 m³
(* 22,872 m³ combined storage gain)			14,472 m³

Note: The figures used by Mr. Singh during his testimony vary from those shown on Exhibit 4a by approximately 228 m³. The tribunal will accept the figures submitted in Exhibit 4a as representing Mr. Singh's view that there is a total net gain of 14,472 m³ as the evidence. The rounding used in Exhibit 6 is not a proper rounding in the tribunal's view. If anything, the rounding should be 14, 500 m³.

With regard to the actual Regulatory Floodline (Hurricane Hazel flood event), the 176.5 contour is the accepted line. In the case of the OKDI property, the Dixie Road crossing acts virtually as a dam, causing flooding on the road itself to a depth (at its lowest point) of 0.9 metres (2.95 feet) for approximately 500 metres (1640 feet) in the crossing area of the Creek, just north of the OKDI entrance.

Mr. Singh indicated that the 10,000 m³ (plus) fill placed on the soccer field would have very little impact on the flood volumes or storage capacity. Despite this belief, Mr. Singh did maintain that his research and calculations show a net storage gain on the OKDI property, a result that the TRCA's policy document actually strives for. He maintained that new storage has been created in three areas, off setting the fill placed on the soccer field.

During cross-examination of Mr. Singh, Mr. Wigley referred to exhibit 4e, entitled 'Volume of Excavation Downstream of Dixie Road'. This exhibit deals with the property, owned by the City of Mississauga, on the opposite side of Dixie Road from the OKDI property. Mr. Singh maintained that his comparison study also shows an increase in storage of 85,217 m³ between the 1976 and the 2005 mapping. The only way this could have occurred was if the City had removed soil from this area when creating a park. Mr. Singh, however, had not checked with either the City or the TRCA to determine if and when this might have occurred. It was pointed out that the City of Mississauga would have required a permit from the TRCA to carry out such work and that no such permit appears to exist.

Mr. Wigley continued by outlining a list of considerations that are part of any flood plain management plan. Mr. Singh did not dispute the validity of this list. The most important consideration would be the future management of this valley. In this regard, the list included:

- the valley needs to be managed from the point of view of the flooding that may occur;
- it needs to be managed according to the existing circumstances;
- it needs to be managed as to what happens in the future;
- the depth of flooding and its potential increase must be considered;
- the volume and the velocity of the flooding and the potential increase must be considered;
- the contours must be examined;
- existing and future road structures crossing the valley must be considered;
- the existing storage capacity must be determined;
- the rate of change in the physical environment must be examined - what might happen in the future such as new development, new bridges and roads in the overall watershed would have an impact;

Exhibit 2 - Tab 9 provides the HEC-RAS numbers that were used in 1997. Mr. Singh used these figures in his information submitted for the fill retention in the soccer field. The flow figure of 389 cubic metres per second and the flood elevation of 176.50 were the 1997 figures. Mr. Singh indicated that the 2008 data shows the downstream flows as 604.5 cubic metres per second and the flood elevation is shown as 176.95 metres, both figures being higher than the 1997 figures. The OKDI documentation questioned why there was such a significant difference (Ex. 2 – Tab 9 – cover statement) suggesting that the TRCA had not done its job in protecting the lands from this increase that could be attributed “*to increased urbanization upstream, and ineffective stormwater management mitigation measures*”.

Mr. Wigley countered with the fact that fifteen years had passed (and perhaps more) since the 1997 figures used by Mr. Singh had been obtained/calculated and much had changed within the watershed in that period of time.

Mr. Singh's report, based on the 1998 information of 389 cubic metres per second, indicates that the water depth fifty (50) metres upstream of Dixie Road is 25 millimeters and diminishes to 10 millimeters, one hundred (100) metres upstream. He staunchly maintained that he had no other choice than to use the 'approved' 1998 figures, although he acknowledged that the TRCA staff did provide him with the updated 2008 figures, but in draft form. In his view, these updated figures were not 'official'. If he had been applying for the permit in 2009, he would have used the up-to-date figures and not the 1998 figures in order to calculate the storage capacity. He agreed that future flood flows and all those considerations outlined by Mr. Wigley would need to be considered in any flood plain management program.

The discussion with regard to the point as to which figures Mr. Singh should have used in order to make his argument about flood storage was extensive. Mr. Wigley indicated that flood flows rose to 453 m³ from the 1998 figure of 389 m³. But despite this, Mr Singh steadfastly continued to maintain that he had no other choice than to use the 'approved' 1998 figures, although he acknowledged that the TRCA staff had provided him with the updated 2008 figures, but only in draft form. He admitted that he did not go beyond 1998 in his calculations and also had not submitted any judgments about what might have happened to the storage levels in the subsequent ten year plus period of time.

Mr. Singh's submission also dealt with other floodplain areas adjacent to the OKDI property, where, he maintained, extra storage exists. One of these is the parkland on the east side of Dixie Road immediately across from the OKDI property, which has been discussed previously in this document. Mr. Wigley submitted that this raised the issue of the 'banking' of floodplain storage, which Mr. Singh felt was a valid system to follow, especially for 'minor filling' as outlined in the TRCA's policy document. He maintained that the OKDI filling is minor and that they should be able to use the storage capacity that is available 'until it is used up'.

In the end, Mr. Singh agreed with Mr. Wigley that flood flows would undoubtedly increase in future years and that there is no chance to create new flood storage areas – which Mr. Wigley stressed was why the TRCA must try to protect the storage they have.

Mr. Singh acknowledged the 1994-95 illegal filling and that since the fill was all removed, it did not result in any increased storage capacity. In addition, Mr. Wigley pointed out that in 2004, the OKDI carried out considerable illegal filling in the area of the meander belt (Ex. 4d). A guilty plea was entered in court and a fine paid by the OKDI (Ex. 8) The OKDI removed this fill, but again, Mr. Singh agreed that no extra storage was created at that time.

During the rehabilitation, a 2-to-1 slope with a five (5) metre set back was to be created in order to provide proper protection in the meander area. It was during the cut back operation for this work that Mr. Singh maintained that a new storage area was created.

Mr. Wigley questioned Mr. Singh extensively with regard to this issue. Reference was made to the report submitted by Terraprobe Limited to the TRCA which outlined a plan and methodology for the fill removal and the restoration to be undertaken. (Exhibit 9 – p. 2) The majority of the fill was placed in the sharp meander area while downstream, there was minor filling. It appears that there were pre and post-fill placement surveys carried out and that Terraprobe concluded their report with the following statement:

“as the locations of the original (pre-filling) and existing (post-filling) slope crest/bank edge of the southerly bank in this area are generally similar.”

“It is recommended that fill removal to retrace the original native till slope must be carried out under the supervision of a geotechnical engineer...”

Mr. Wigley asked Mr. Singh if he agreed that the OKDI was basically requested to ‘retrace to the original slope’ (Transcript 1 – page 173). He further referenced Mr. Singh’s own report (Exhibit 2 - Tab 7) wherein one of the objectives of the report (Section 2.2) was to:

“Restore the creek to its existing condition, ie. the state that prevailed before the fill was placed.”

Mr. Wigley noted Section 9 of Mr. Singh’s report which established the set back from the top of bank, creating an area where no construction could occur. The report outlined that the TRCA required protection of the toe of the slope as well as stabilization of the slope, both of which were *“in addition to the removal of all fill that violates the authority fill regulation, and restore the creek to existing condition.”*

Further, Section 10 of the report – Fill Removal – discussed the consequences of cutting the slope flatter than the existing conditions, (which might increase storage capacity) due to the fact that steep outer banks characterize stream banks around bends. The removal of more material *“is equivalent to assisting the creek to migrate more southerly to the parking lot area.”* A statement outlining the OKDI’s position in the matter followed this discussion:

“Further, the Ontario Khalsa is not responsible to remove any more soils than that which constitutes the violation.”

Mr. Singh agreed with Mr. Wigley that the project and the work carried out (in the context of Mr. Singh’s report) took fill out of the existing situation. However when asked, on the basis of the drawings and his report, to verify that the work carried out did not create ‘any more flood storage capacity’, he disagreed, bringing the proceedings back to Mr. Singh’s contention that new storage had been created. (Transcript Book 1 - p. 180)

A comparison between the 1976 floodline and the 2005 floodline indicates that the flood area has expanded and as a result, as submitted by Mr. Wigley, would use up all of the storage. However, despite agreeing hypothetically that the flooding has expanded, Mr. Singh continued to maintain that some excavation took place between 1976 and 2009, some of which has been filled in, but some storage remains – storage that would off set the 10,360 cubic metres of fill placed on the soccer field.

Mr. Wigley referred the witness to a previous violation for the placement of fill in 1993. At that time, the OKDI did remove the fill back to the original parameters. B.J. Stassen undertook a survey following the removal of the fill (Exhibit 10 dated July 11, 1993) based on a non geodetic Mississauga benchmark, which was not compatible with the universal bench mark. As a result, it is accepted that the 1976 and 2005 mapping was the reliable source and not the Strassen survey.

A discussion took place regarding the method by which the mapping had been prepared. A tolerance factor is used in interpreting the photography (the 1976 was analog and the 2005 photography was digital) in order to produce the contour mapping used by the TRCA. The tolerance factor in more recent mapping was stated as being approximately a quarter of a metre, while it could be more for the earlier mapping. It was the earlier maps that were used by Mr. Singh to carry out his calculations that resulted in his conclusion that there was a storage gain of 85,217 cubic metres between the two mapping periods. (Ex. 4e)

With reference to the Mississauga parkland, Mr. Singh maintains that a half a metre of fill was removed (cut) from across the parkland area when the City of Mississauga created the sports fields, thus providing the storage gain of 85,217 m³. However, it was noted that this would be within the tolerance level of the 1976 mapping. (Transcript - Book 2 - p.8)

Referring to the mapping found in Ex. 2 – Tab 9, titled “*Cross Section locations for HRC RAS Model for TRCA 1976 Mapping*”, Mr. Wigley pointed out the 11.12 cross section. This cross section travels through the valley from north of the OKDI lands, across the Etobicoke Creek and the OKDI soccer field on up to loop around the OKDI temple area and over to Dixie Road. The plan also shows both the regional floodline and the Regulation line.

Next, referring to Sheet 20 - the 2005 mapping, the floodline has expanded to actually come in contact with the temple building. Mr. Singh maintains that this indicates that more storage exists. He did agree that the expanded floodplain has used up all the storage he maintained existed, except for the soccer field expansion amounting to the 10,360 cubic metres. Mr. Wigley countered with “*the floodline has expanded. It’s used up all that storage that you talked about, and its expanded further.*” Transcript Book 2 – p. 14) Mr. Singh continued to maintain that some excavation had taken place, thus increasing the storage capacity enough to off set or accommodate the soccer field fill.

Mr. Wigley reiterated that the accepted flood line level in the soccer field was 174.5 on the 1976 mapping. This became 175 on the 2005 mapping, indicating an expansion of the area needed to store any flood waters, and Mr. Singh agreed that these numbers are both within the tolerance level and are roughly the same. Mr. Wigley described this as “*No fill in; no fill out.*” and “*so between 1976 and 2005 nothing has happened*”. However, it is known that things did happen on the soccer field after 2005. Fill went in the soccer field but not out. (Transcript - Book 2 - p 34)

Referring to Exhibit 4b, Mr. Wigley noted that Mr. Singh showed a storage gain of 22,872 cubic metres from the soccer field and the driveway entrance area. Mr. Singh maintained that the ‘new’ storage was found “after the fact” supposedly because of some cuts that took place on the soccer field. Mr. Wigley countered that all the storage is:

“either used up or are zero in the first place, then you would agree with me that the only justification you got for asking for 10,300 cubic metres of fill to remain in the flood plain is because you need to level the field out because it is lumpy”
(Transcript Book 2 – p. 44)

Although Mr. Singh appeared to agree with Mr. Wigley’s analogy, he replied that doing that was not his decision, but was a decision of OKDI.

As there was no re-examination of Mr. Singh by Mr. O’Kane, the Respondent called their first witness, Ms. Laurian Farrell. Ms. Farrell was accepted as an expert witness for the TRCA. Ms. Farrell was the Manager of the Water Resources Engineering Division at the time the application was submitted. She is now Manager of Flood Risk Management and Infrastructure (Ex. 3 - Tab 2). In this capacity, Ms. Farrell is involved with looking at options to reduce the existing flood risk within the watershed. She is familiar with the process of flood models. Ms. Farrell was qualified as a water resources engineer and geo fluvial morphologist.

Ms. Farrell became involved with the OKDI when the violation notice was first issued. Her staff dealt with the details but she dealt with the fluvial geomorphological issues, meeting with Mr. Singh regarding the 2004 violation involving the dumping of fill in the floodplain in order to stabilize the meander belt. -It was her opinion:

“that the 10,300 cubic metres of illegal fill, definitely has an adverse impact on the flood condition”. (Transcript-Book 2- p. 52) and further, *“There is no doubt in my mind that it **negatively impacts the control of flooding.**”* (Transcript - Book 2 - p. 84)

Ms. Farrell explained that the TRCA has the mandate to consider the watershed as a whole system. This involves how water moves through the system from the time it rains and the water penetrates the land, then moving through the watershed down to the lake itself...in this case, Lake Ontario. The Authority relies on the HEC modeling process as well as flood line mapping. However, the characteristics of the flow and the type of storm event are also reviewed to help show where the hazard areas exist. In Ontario, Hurricane Hazel has set the limits as the Regulatory Storm. Issues such as climate change, increases in flows resulting from development pressures and land use changes all are investigated in order to be prepared for what might happen.

The characteristics of the valley itself play an important part in the evaluation. Any alteration to the valley in the form of the placement or removal of fill will have an impact on how the water will travel through the system. The OKDI fill obviously would change the *“cross-section that the water has to go through”* (p. 54) due to the physical change of the valley. The modeling helps the TRCA to determine the impact of this change, but as described, they must look beyond the models.

The impacts that are expected because of this change are, as follows:

Storage Capacity

It is known that the flow of 389 cubic metres per second calculated in 1978 has increased to 453 cubic metres per second. This is based on all the data regarding growth within the Peel Region municipalities. The valley system has not changed and since there is no new storage in the system, this results in an increase in the flood levels in the valley. The change in the flood lines in the 2005 mapping reflects this point and more flow means more risks.

The existing Official Plans show future development up to a certain time, but there are further lands that can and undoubtedly will, be developed in the future. The TRCA thus tries to analyse future flows and by doing that on the Etobicoke Creek, they determined another figure of 610 cubic metres per second as the future flow that must be accommodated, still within the same valley system.

The job of the TRCA then becomes one of managing the flood risks and working to mitigate potential future risks. Ms. Farrell stated that:

“filling in the flood plain or altering the storage on many levels has impact on that risk that is negative and not positive”. (Transcript Book 2 – p.65)

Mr. Singh was made aware of these figures and was also told that the updating process was underway. The actual HEC-RAS model, which attempts to replicate what actually would happen on the ground under the different flow figures, had not been completed at that time. The flows, however, were known as of 2007, just not put into the model form. The regulatory flow figure was going to be 453 cubic metres per second. This was known.

Mr. Singh’s model for the OKDI application, even with the lower flow figure, actually did show an increase in flood levels. With the higher flow figures, naturally, the flow would increase even more, thus requiring more storage capacity.

Timing Effect of Flows

If the peak flows of the main river are different than the peak flows of any tributaries, then the flows are kept separate and the flooding impact will pass in stages. If, however, the valley topography is changed, the potential exists for the timing effects to come together resulting in the flooding of lands that may not have been flooded previously, as well as increasing the volume of flood waters affecting the lands and people downstream. In the case of the Etobicoke Creek, the main tributary joins the main creek upstream of the OKDI site, within the Pearson airport lands. In addition, there are many other tributaries downstream that play a part in the issue of ‘timing effect’.

Any action that impedes the flow of water at the rate it normally would flow (so many cubic metres per second) would create a situation where more of the valley system would be needed and used for storage and/or the water could be impeded by a “pinching” of the valley, resulting in an increase in the speed of the flow, in order for the water to get through the system.

Cumulative Impact

This is the kind of situation that could “*potentially occur as a result of the filling that is being proposed*” (p. 61) Ms. Farrell pointed out that 10,360 cubic metres of fill may seem small over the watershed as a whole, but the Authority must concern itself with the **cumulative impact** of any filling carried out or requested in the watershed. Adding these impacts together creates the problem. A review of upstream private properties just within Brampton alone, showed that even if a small proportion of the 200 parcels consisting of 192 hectares of flood plain, requested the same thing that the OKDI wants, there would be a significant impact. (Ex. 13)

In cases like the OKDI request, the TRCA would issue a permit “*if the proponent could demonstrate that they achieved a cut and fill balance*” within “*incremental increases within the cross-section*”. (Transcript Book 2 – p. 69) This is to make sure that “*balance is achieved in the shape of the valley, not just as a whole*”. (p. 70) Ms. Farrell indicated that this has not been achieved in the OKDI proposal.

Damming Effect

With regard to the damming effect, Ms. Farrell indicated that Dixie Road does have the effect of holding the upstream flow back. Since the river cannot travel in a natural geomorphological way, or as Ms Farrell stated “*do its own thing*”. (p. 73), one of the Authority’s goals is to have the Dixie Road structure widened in order to allow the Etobicoke Creek to naturally meander and migrate in an attempt to stabilize the river into a meander belt of 101 metres as opposed to the existing state of constant erosion. This is the philosophy that exists today as opposed to the prior philosophy of getting rid of the water as fast as possible by piping or channelization. Dixie Road should have a 100 metre crossing instead of the existing 17 metre crossing, which results in the overtopping of that road by flood waters. With increased flows, the flood level over Dixie Road would expand and last longer while the speed of flow would increase as well. Of course, the constraint to this is municipal budgets.

Ms. Farrell was asked a question about the 85,217 cubic metres of fill that Mr. Singh alleges was removed from the property owned by the City of Mississauga on the opposite side of Dixie Road. Although not on the TRCA staff at the time, her investigation of the matter failed to find any evidence that this ever occurred. The TRCA records do not have any reference to the removal, nor the granting of a permit to the City to do this work in the valley. She noted that the City works closely with the TRCA.

Mr. Wigley reviewed Mr. Singh’s analysis which “*goes backward in time to 1976, 1993, 2005 and so on, to look at the pluses and minuses of flood storage capacity*”. Ms. Farrell indicated that this was not an appropriate analysis of the issue. The mapping was not created for this purpose and it only has a level of accuracy to delineate flood lines for the purposes of management. To show how cut and fill would have any effect, a total station survey is the appropriate method to secure accurate mapping. Going back to 1976 does not deal with the present day issues or the risk factors involved. The TRCA deals “*with risk today and what the impact of the proposal will be on that risk and how do we reduce that risk wherever possible, and if we can’t, then we don’t allow it.*”(Transcript Book 2 - p.80)

With regard to the level of tolerance, the map sheets are accurate to .5 metres and that is recognized as being either plus or minus. The 1976 mapping was quite accurate but the 2005 mapping improved it further. These maps are used to compare broad-scale changes in the watersheds, but it should not be used for detailed cut and fill analysis.

Ms. Farrell believes there were a number of options that the OKDI could have followed as opposed to placing fill on the site, such as:

1. Rolling the field would have helped to improve the ground; and
2. Cutting the higher portions of the field was the obvious option. Exhibit 15 illustrated this option which would have resulted in a net gain in storage and provided a positive approach to flood plain management.

During cross-examination, Mr. O’Kane highlighted and/or clarified a number of points with Ms. Farrell:

- The approved version of Map 20, at the time of submission, was the 1976 version. The model, however, had been updated in 1996, but the new Map 20 was not issued until January 2011 – after the application was submitted.
- Mr. Singh was given the HEC-2 model and the updated 2007 information indicating flow of 450 cubic metres per second.
- The actual flow rate is established by the Ministry of Natural Resources, based on the flow of Hurricane Hazel. This flow rate is the basis for Conservation Authority’s Regulations, such as the TRCA’s Regulation 166/07.
- The Regulation itself is not updated but it allows for the update of the qualitative values from time to time. This recognizes the dynamic characteristics of watersheds and the actual physical changes that take place.
- Ms. Farrell found Mr. Singh’s analysis “technically acceptable” during the review process and had no issue with his comments regarding the hydraulic capacity upstream of the OKDI property. Downstream, the TRCA had hoped to secure some widening at the Dixie Road crossing to accommodate the natural meander belt.
- Mr. O’Kane emphasized that, to date, neither the City of Mississauga nor the Region of Peel have adopted the natural meander philosophy, unlike the City of Brampton. However, Dixie Road is a Regional Road and Ms Farrell had no ‘official’ knowledge that a policy exists or that the Budget includes any funding for a new Dixie Road bridge. She, however, stated that Regional staff, do recognize their old practice of “pinching culverts’ must change. (Transcript Book #2 – p. 92)

- Mr. O’Kane suggested that the construction of a new bridge may never happen since there are too many competing interests for taxpayers’ dollars. Ms. Farrell agreed but was optimistic about the future.
- There is a general prohibition of development in the floodplain in Regulation 166/06, but Section 2, subsections 2 and 3, allow the Authority some discretion to allow for development provided five conditions are met dealing with flooding, erosion, dynamic beaches, pollution and conservation of land. It was noted that the use of the valley as a sports field is a legitimate use.
- The issue dealing with flooding and the control of such flooding was the only concern referenced in the original staff report, but Ms. Farrell indicated that there certainly were other concerns.
- Reference was made to Section A.1. – Standardized Description of Flood Magnitude in the TRCA’s **Flood Contingency Plan** (Exhibit 16), dated 2009, but updated in 2012. The wording developed to describe the flood characteristics was used to allow the public to have a better concept of what was actually happening from an impact of no flooding and nuisance flooding to severe flooding. All of the categories could apply in any watershed depending on your location.
- With regard to the OKDI site, Ms. Farrell would categorize it as ‘Major Flooding’ if a Hurricane Hazel storm occurred, with up to a “metre of flooding which is significant’. (Transcript #2 – p. 100)
- In reference to Exhibit 3 - Tab 9 - the 2005 mapping (also approved mapping in 2009 and 2011) shows the actual Regulatory flood line going through the Temple itself. Ms. Farrell indicated that this is the line without the 10,360 cubic metres of fill in place- basically the line IF the fill is removed.
- By referencing the before (a precipitous wall) and after (a more gentle slope) photographs (Ex. 2 - Tab 7), Mr. O’Kane reiterated Mr. Singh’s assertion that more fill was taken out than was put in. Ms. Farrell, however, stated she had no evidence to support this assertion. The tribunal notes there was no photograph of the precipitous slope before the OKDI dumped fill over the bank.

Mr. Quentin Hanchard, Senior Manager of Development, Planning and Regulation for the Region of Peel Area, was sworn as a witness for the TRCA. Mr. Hanchard is a Professional Planner with a Masters Degree in Environmental Studies. His team reviews development applications in their capacity as a commenting agency under the **Planning Act**. In addition, the team reviews permit applications in the Peel area as part of the regulatory responsibilities of the TRCA.

Mr. O’Kane raised several issues with regard to Mr. Hanchard being qualified “to give professional planning advice and in particular, in connection with the Conservation Authority’s policies”. (Transcript #2 – p. 117)

1. the relevance of planning information – usually looked upon as not relevant in conservation matters;
2. the possibility of Mr. Hanchard straying beyond giving fact-based policy evidence and how he would apply it. Mr. O’Kane believes that any interpretation of “what the words in the policy mean” is inadmissible evidence, since it is his submission that the interpretation of the policy is a question of law and the responsibility of the tribunal itself. (Transcript #2 – p.119) Mr. O’Kane cited two examples where the courts have ruled in such a way- *Niagara River Coalition v. Niagara-on-the-Lake (Town) – Court of Appeal for Ontario – May 21, 2009* and *Simcoe Residences Corp. v. Municipal Assessment Corp. Region No.9 –Ontario Assessment Review Board – May 18, 2010*. Mr. O’Kane particularly referenced the Niagara River Coalition case in which the court indicated that documents like official plans are completely inadmissible. He also stated that he would submit an Assessment Review Board case of 2011, where the Board disqualified the evidence of planners with regard to the interpretation of regulations.

As a result of this submission, Mr. O’Kane served notice that he would object if Mr. Hanchard’s evidence strayed beyond his expertise as a professional planner. Mr. Hanchard can be “qualified as a professional planner with an expertise in that area. That doesn’t include the interpretation of legislation or documents like official plans or policy documents such as that adopted under this regulatory regime”. (Transcript #2 - p. 123)

Mr. Hanchard was accepted as an expert witness as a professional planner.

With regard to his work with the Conservation Authority, Mr. Hanchard indicated he does express opinions as to whether an application conforms with an official plan (as he has done in the past at the OMB on behalf of the TRCA) and as he does in reviewing development applications with regard to conformance with the Authority policies. He agreed that ultimately, it is the Executive Committee and the Authority itself who have the final say.

Mr. Hanchard reviewed some history about the formation of conservation authorities. Initially, the focus was the management of natural resources (excluding natural gas, coal, oil and minerals). After Hurricane Hazel, the CA’s took on the principal responsibility for flood hazard management within the Province. The legislation established a goal to develop programs or policies to manage their work. (Sections 20 and 21 of the **Conservation Authorities Act**. Within the TRCA, the Valley and Stream Corridor Management Program is such a program.

Placing the OKDI site in context of the overall area of TRCA responsibility, Mr. Hanchard noted that the Etobicoke system is one of the areas within the GTA of rapid expansion by urbanization. The changing land use “is changing very much the water regime within those watersheds. Farmers’ fields are disappearing, being replaced by impervious surfaces. In addition, the overall green space has disappeared leaving the valley corridors as our only urban green space. Water now runs off faster and can create “a flashy characteristic to the stream’ A series of aerial photographs from 1954 to 2009 illustrated the changes in the area of the OKDI site. (Ex. 18)

Exhibit 19 (a – e) was a series of maps of the TRCA’s area of jurisdiction and was presented to the tribunal to illustrate the impact of urbanization. Exhibit 19a shows the remaining wetlands within the Etobicoke Creek watershed, amounting to 0.6 percent of the watershed. Wetlands play an important role in flood attenuation by holding back the water from moving quickly into the streams. There is a priority of recreating wetlands on TRCA lands.

Likewise, the disappearance of forest and vegetative cover (riparian cover) also has an impact on flood control. Again, this aspect slows down the flow of water to the streams as the water seeps into the ground or evaporates back into the air. Creating additional forest cover is another priority of the TRCA to add to the less than 5% cover existing in the watershed. Because most of this cover is also in the stream corridors, runoff is obviously extensive from impervious surfaces surrounding the corridors. The TRCA report shows that “there is riparian cover in less than half of the valley systems in the Etobicoke Creek area”. (Transcript 2 - p. 147) All of this makes the Etobicoke system one of the most affected by urbanization within the TRCA’s jurisdiction.

Mr. Hanchard reiterated the existence of flood vulnerable areas within the watershed, some of which have provincial Special Policy Area designations. Exhibit 19c shows the extensive urbanization within the watershed, highlighting the amount and impact of the industrial land use and other impervious uses. The final map (Exhibit 19e) illustrates this quite graphically with the vast majority of the watershed “very impacted” - up to 65 % - by impervious cover.

What this says is that the Etobicoke watershed has little capacity to overcome the difficulties it faces. Limited wetlands, limited riparian cover, lots of development all contribute to the difficulties making it more important for the TRCA to deal with issues such as cumulative impacts from private landowner’s applications for development. Storage capacity within the watershed becomes so important in order to protect the public, both life and property.

The TRCA adopted its Valley and Stream Corridor Management Program in October 1994. (Exhibit 21- Tab 1). Section 2.1. outlines the **principles** established to guide the development and implementation of this program. Several of the principles were highlighted:

***Principle 1:** Valley and stream corridors are important natural resources that function as an ecological system and must be managed within the context of the watershed as a whole.*

***Principle 2:** Ecological health of valley and stream corridors requires that the system be conserved from the headwater streams to the river’s mouth.*

***Principle 3:** The conservation of valley and stream corridor systems requires the protection of the corridor landforms and watercourses.*

***Principle 4:** Valley and stream corridors are vulnerable to the incremental and cumulative effects of land uses and land use change.*

***Principle 5:** The successful management of valley and stream corridors is dependent on good tableland management.*

***Principle 6:** Proposals affecting valley and stream corridors must contribute to the protection and rehabilitation of ecological health; prevention or reduction in risk from flooding, erosion and slope instability, and should include opportunities for public use and enjoyment.*

Mr. Hanchard indicated that one of the major issues with the OKDI application was the change of the corridor landform by the fill placed on the soccer field. (Principle 3) In addition, another major issue is the impact on the valley system by cumulative filling as outlined in Principle 4 and finally, the impact of the tableland changes in the watershed as a whole.

Section 2.2. deals with the **Programs Objectives**. Subsection 2.2.2. is worth repeating:

*“ The Authority’s objectives for valley and stream corridors with respect to environmental protection and prevention of new hazards are:
B) To prevent development that negatively impacts on the natural landform, functions and features and/or affects the control of flooding, pollution or conservation of” land within valley and stream corridors.*

Ms. Farrell had stated that the TRCA’s opinion was that the amount of fill placed in the valley has a negative effect on the control of flooding.

Mr. Hanchard moved on to identify the relevant policies indicating that Section 3 ‘*Defining Valley and Stream Corridor, Boundaries And Alterations*’ of the Policy document (Exhibit 21-Tab 1- p. 13) would define the OKDI property as a Valley Corridor. Subsection 3.2.1. – C) states:

“Alterations of valley corridors through such activities as filling or enclosure shall not be permitted to create additional useable area and/or to accommodate development.” (p.19)

Section 4 of the document outlines the adopted Policies and Criteria used by the TRCA to review and evaluate any development proposals that are submitted that are within or adjacent to valley and stream corridors. Subsection 4.1.2. deals with *New Resource –based Uses*. (p. 27), in particular, the following subsections are the most relevant.

*4.1.2. A) The Authority encourages the public and private use of valley and stream corridors only for such uses that are compatible with their landform, features and functions such that:
- existing topography is retained;
- existing features and functions are protected and improved;*

The OKDI has submitted that the soccer field is a continuing use within the valley corridor, while the TRCA’s position is that fill has changed the soccer field significantly. The landform itself has been changed and the flood storage has been decreased. Such encroachments should not become formalized and infringe on the TRCA’s ability to control flooding.

*B) New ‘resource-based’ uses may be permitted within valley and stream corridors subject to the following policies and criteria:
2) Such uses shall not affect the control of flooding, such that:*

- i) modifications to flood plain contours shall be minimized to grade changes not exceeding 0.5 metres to 1.0 metres;*
 - ii) the predevelopment characteristics of the flood plain, including flood storage and conveyance characteristics, shall be maintained.*
- Detailed hydraulic and hydrologic analysis shall be required to demonstrate compliance;*
- vii) there shall be no increase in flood risk to upstream or downstream properties;*

Mr. Hanchard reiterated that the evidence has already established that there is an impact, both upstream and downstream, as a result of the fill – “*both in a local sense and in a cumulative sense*”. (Transcript #2 – p. 160)

Section 4.2.2. E) ‘Property Improvements and Ancillary Structures’ deals with projects that are smaller in scale than the OKDI project, such as gazebos or minor fill and minor additions. The policy does allow development if the project is in compliance with certain conditions. However, Mr. Hanchard indicated that this policy “does not deal with the order of magnitude and scale of development that has happened on the OKDI site”. (Transcript #2 – p. 162)

Mr. Hanchard referenced the **Provincial Policy Statement**, dated 2005, (PPS) Section 4.0. Implementation and Interpretation (Ex.21 – Tab 2 – p.24) on the basis of the belief, that:

“although the provincial planning or Provincial Policy Statement pertains to planning matters, we also believe, however, it provides direction with respect to tribunals and the decisions of other boards.” (Transcript #2 – p. 164)

Section 4.2. directs that consistency shall be maintained by a municipality, a board, commission or agency of the government, among other groups “*in respect of the exercise of any authority that affects a planning matter*”.

Mr. Hanchard maintained that, although the case at hand is not a planning matter specifically, the PPS represents the voice of the province with respect to the intent on planning matters to deal with issues in a consistent manner. As a result, reference to the PPS is important, especially with regard to **Natural Resources**. (Section 2.1.)

Most of the statements contained in Section 2.1. of the **PPS** are relevant to the OKDI proposal:

*“2.1.1. Natural features and areas shall be protected for the long term.
2.1.4. Development and site alteration shall not be permitted in c) significant valleylands south and east of the Canadian Shield...unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions,”*

The placement of fill as well as the grading, undertaken on the OKDI valley lands, qualifies as site alteration according to the definition in the **PPS** document. (p. 36)

Section 2.2.1. – **Water:** states that:

“Planning Authorities shall protect, improve or restore the quality and quantity of water by: a) using the watershed as the ecologically meaningful scale for planning;...

d) implementing necessary restrictions on development and site alteration to:

2. protect, improve or restore vulnerable surface and ground water, sensitive surface water features and sensitive ground water features, and their hydrologic functions;”

And further, in Section 2.2.2:

“ Development and site alteration shall be restricted in or near sensitive surface water features and sensitive ground water features such that these features and their related hydraulic functions will be protected, improved or restored....Mitigative measures and/or alternative development approaches may be required....” (p. 16)

These policy statements by the Province of Ontario are important in that they highlight:

1. the need for overall watershed planning;
2. the need for restrictions on development and site alteration in order to be implemented;
3. the need to protect, improve or restore the hydrologic function of water;

Section 3.1. deals with **Natural Hazards** and is the section most used by conservation authorities in both their planning and regulatory responsibilities. Mr. Hanchard referenced the **Memorandum of Understanding** between the Ministry of Natural Resources and Conservation Ontario which delegates responsibility to Conservation Ontario and the Conservation Authorities for the implementation of the Natural Hazards section of the **Provincial Policy Statement**. Consistency with this policy is very important in the work of all Authorities.

This section (3.1.2.) states that:

“Development and site alteration shall not be permitted within:....

d) a floodway regardless of whether the area of inundation contains high points of land not subject to flooding.”

‘Floodway’ is defined in the policy as:

“for river, stream and small inland lake systems, means the portion of flood plain where development and site alteration would cause a danger to public health and safety or property damage.

Where the one zone concept is applied, the floodway is the entire contiguous flood plain.” (p. 31)

Mr. Hanchard concluded that:

“the works that have been completed are not consistent with those policies”.
(Transcript #2 – p. 171)

Finally, Mr. Hanchard commented on various issues that had been raised through the hearing:

1. He had no knowledge of the City of Mississauga removing fill from the park area on the opposite side of Dixie Road from the OKDI lands. Such removal would have been very significant and obvious.
2. The TRCA does not consider the 10,360 cubic metres of fill to be minor in nature. Such applications would be in the neighbourhood of 30 cubic metres or approximately four dump loads of soil as opposed to the approximate 1300 dump loads required for the 10,360 cubic metres forming this application.
3. The Authority has no guarantee regarding the quality of the fill as well. This would be a concern when dealing with the use of land for active park purposes. There is no information regarding any possible health risks to the present users.

Several more issues were dealt with during the cross-examination by Mr. O’Kane.

1. Mr. Hanchard agreed that the depth of fill could meet the recommended grade changes of not greater than 0.5 to 1 metre, as outlined in Section 4.1.2. B) of the **Valley and Stream Corridor Management Program**. However, he also indicated that the policy must be dealt with as whole and the other policies were more relevant. In the same vein, Mr. Hanchard stated his view that the required detailed analysis should have dealt with much more than the property itself and looked at the potential impacts on the broader reach.
2. Mr. Hanchard agreed that the use of the field for sports such as soccer was a lawful use, as submitted by Ms. Farrell. However, he did question whether a permit should have been secured or was required in order to prepare the field physically in the first place. The only way a permit would not have been required was if nothing had been done originally to allow the field to be used for sports activities. No permit had ever been issued.
3. Mr. Hanchard clarified that the ‘intrusive use’ he had previously referenced was the amount of fill placed on the field, not the soccer playing use. However, under the riparian and natural cover policies, the soccer field usage is not the best use of the valley corridor as it provides no flood control protection as would natural vegetative cover, which would help to slow down the speed of the water in a flood event.

4. The issue of the word “minor” and its meaning was discussed. Over a twenty year span of dealing with applications such as the OKDI project, the TRCA (MTRCA) has used a quantitative figure of not more than 30 cubic metres of fill to describe minor. Mr. O’Kane pointed out that this word is not defined in the document, but Mr. Hanchard stated that the policy does give some guidance as to the scale and magnitude of what “minor” would be.

“To this end, property improvements and ancillary structures associated with typical lot appurtenances, such as fencing, decks, stairs and minor alterations to grade/landscaping may be permitted subject to and in compliance with the following:

- 1) If located within the Regulatory Flood Plain, the location and design must:*
- i) not result in unacceptable impacts to flood storage and conveyance;*
 - ii) not create or aggravate flooding on adjacent, upstream or downstream properties;*
 - iii) minimize property damage associated with flooding to the extent technically possible and the liability be assumed by the owner.” (Ex. 21 - Tab 1 - p. 43)*

It was Mr. Hanchard’s submission that this paragraph “operationalizes” the policy.

5. Mr. O’Kane referred to a cut and fill operation that took place on the Action Trailer site upstream from the OKDI site (Ex. 21) in 1999 – five years after the Valley and Stream Corridor Management Program was adopted. Mr. Hanchard indicated that this was not a new application but a renewal and information updating of a permit issued in 1988. Mr. O’Kane stressed that there was a net storage gain of 2500 cubic metres during the cut and fill exercise. A fact agreed to by Mr. Hanchard. Mr. Hanchard later stated that the original applicant had actually done the filling, but not the cutting as was required. A violation notice had been issued. This was rectified with the renewed permit to a new owner.

SUMMATIONS

For the Appellant

Mr. O’Kane reiterated his view as to the essence of the appeal....the question is “*whether placing this 10,300 cubic metres (of fill) in the flood plain adversely impacts the control of the flooding in the Etobicoke Creek*”. (Transcript #2 - p. 195)

OKDI has acknowledged that they filled the floodplain without a permit. They have, however, attempted to show that in terms of the overall area, and the work they have previously undertaken, this 10, 360 cubic metres of fill is a ‘minor alteration’ which is allowed

under the Valley and Stream Corridor Management program. The word ‘minor’ is not defined and therefore, the “*TRCA has retained for themselves flexibility with respect to the application of what minor filling means.*” (Transcript #2 – P. 196)

Mr. O’Kane agrees that the flood line has moved but he maintains that Mr. Singh’s additional evidence shows that something has been taken out, thereby creating more storage area within the OKDI lands themselves. Exhibit 6 points to the creation of new storage in the driveway area, the soccer field and in the bank restoration area, which concludes there is a net gain of 14,700 cubic metres. This kind of storage increase is a benefit to the watershed and should render the application as minor in natural and consistent with the issues raised in the Valley and Stream Program concerning flood storage, aggravating flooding on adjacent lands and the minimizing of possible property damage from flooding.

Mr. O’Kane submitted that the application would have no precedential value. He contends that it is the decision of the Mining and Lands Commissioner and should not cause a problem for the TRCA in the application of their policies. In addition, it is his view that precedent “*only governs when you’ve got facts that are comparable*”. (Transcript #2 – p. 199). Such a comparison would be very rare in dealing with a sports field and a religious organization.

Mr. O’Kane agreed that he had no problem with Mr. Hanchard’s evidence in that Mr. Hanchard had adhered to telling the tribunal what the policy is and not interpreting it.

For the Respondent

Mr. Wigley began by reminding the tribunal that, although this was an application to allow fill to remain, it must be dealt with as an application for permission to fill. The tribunal must deal with the application as if there was no fill there. The question becomes “*would this application then affect the control of flooding, pollution, erosion, dynamic beaches, conservation of land in your opinion?*” (Transcript #2 – p. 201)

There are two issues that need to be addressed.

The second issue deals with pollution. Since this is a *de novo* hearing, the tribunal, in dealing with this as if the fill was not there, would be able to discuss the fill material and its quality before it was put in place. Conditions could be applied if the application was to be granted that would require clean fill that would not impact, in a negative way, on the valley itself as well as the people who might use the land as a sports field. However, since the fill is in place, such conditions cannot be imposed, except to require the applicant to demonstrate that the fill was clean when it was put in place. No such evidence has been provided.

The primary issue is the control of flooding. The only way a basin (a river valley) gets bigger is if there is a cut without a fill. If they are done as a cut and fill, they basically balance out and the basin size remains the same. It is the spreading of the water beyond the basin that is the problem for the TRCA. They are trying to control the flooding inside the existing and finite valley basin.

This spreading may occur because of two major issues:

1. More water is coming down into this particular area;
2. There is less storage capacity in the valley now than before, due to filling- it is shallower;

These facts lead to an expansion or spreading of water beyond the regional storm level and *“It will spread further because you’re decreasing the storage capacity in the river valley. It’s as simple as that. You’re not increasing the basin.”* (Transcript #2 – p. 205)

Mr. Wigley noted that this is the kind of situation that reduces the ability of conservation authorities to control flooding in order to avoid risks to humans and property and he further noted that The Mining and Lands Commissioner has tended to adopt the position the TRCA and other Authorities have taken with regard to the depletion of flood storage capacity.

Mr. Wigley addressed the issue of the creation of extra storage capacity due to work carried out on the OKDI property. Mr. Singh maintains this extra storage emanates from three locations:

1. the driveway area
2. the soccer field
3. the meander belt

The work in these areas occurred (more or less) before 2005. That means the tribunal should decide the reference point in time when considering the control of flooding. Mr. Wigley submitted that the tribunal must look at the project on the basis of it being undertaken today or at least at the time the application was made in 2009, not in 1976 or 2002, etc. The decision regarding this issue really should be reviewed on the basis of the control of flooding in this watershed tomorrow and what impact is anticipated that the Authority will have to deal with in the future.

Mr. Wigley reiterated that Mr Singh had agreed that the consideration of the application had to be as of to-day. Quoting from the Transcript, Mr. Wigley pointed out that:

“I took him through an initial set of questions in which I said you have to consider it today. He answered yes. And you have to apply the future considerations. Yes. All of the questions that I put to him he answered “yes”, and that the consideration that has to occur. And then you couple it with the very fact that at the very end, after I finished my cross-examination this morning, he basically agreed that the floodline in 2005 was getting bigger, all of the storage things that he believed existed were used up, and now he wants to use up another 10,300 cubic metres of space in the basin. It affects the control of flooding, very simply.” (pages 208-209)

Mr. Wigley concluded by summarizing the relevant issues:

1. If you have lost storage, you cannot say there isn't an affect on the control of flooding.
2. The name of the organization submitting an application is irrelevant, as is the fact of the use of the land as a sports field or a market garden. The issue is the fill.
3. If one applicant receives permission to dump fill in the flood plain, the point arises as to why cannot anyone else. The precedent is important to the Authority in making their decisions.
4. The evidence submitted showed an increase in water depth-flooding at Derry Road and at Dixie Road. Dixie Road had a water depth of 25 millimeters while 100 metres upstream of Dixie Road, the water depth was 10 millimeters. Something has happened for the water depth to increase between those two points. It may be a localized impact but it raises the importance of cumulative impact.
5. Mr. Singh did not use the increased and most up to date flow rates in his calculations. It was incumbent on him to at least say the impact would be greater due to this. Mr. Singh did not apply his professional judgment in completing his report.
6. Mr. Singh's storage credit assumption does not really exist, as he failed to recognize all the changes in the valley system due to urbanization, since the 1976 mapping was done. He compared mapping without accounting for the 0.5 metre tolerance on all the maps and did not used the TRCA's up to date flow figures
7. The mapping shows that fill was placed, not cut from the OKDI lands in the vicinity of the entrance way. There is absolutely no evidence to show that fill was removed from the Mississauga lands on the opposite side of Dixie Road. With regard to the meander belt, the documents show that fill had been shoved into the valley, the violation discovered and OKDI was ordered to (and only wanted to) remove that which they had put in. No new storage was created during this restoration work.
8. The effect caused by the damming effect of the Dixie Road bridge will obviously cause more water to be held back on the OKDI lands with no place to go but over the roadway itself. The velocity will increase and the flooding will last longer, thus creating an increased safety hazard for the area due to the blockage of a major road.

9. If at some time in the future, a new bridge is built at this location allowing the water to flow downstream more freely and faster, the timing of downstream flooding will be impacted.
10. There was other ways of dealing with the sports field problem without filling it. Rolling the field would be the first thing that should have been done or some initial cutting.

Mr. Wigley referenced *Nagy v. Metropolitan Toronto and Region Conservation Authority*, March 19, 1979, (unreported) with regard to the matter of precedence and its significance in relationship to the control of flooding and its prevention. It is an issue which causes the Authority much concern. The Authority agrees with Commissioner Ferguson's statement in the *Nagy* case.

"While the individual case may not cause significant flooding the consideration of the application must relate to the broader concept of control of flooding and whether the granting of permission would create a precedent that could not be distinguished on its merits in subsequent applications. It is proper for a conservation authority to consider the doctrine of precedent because of its relation to the "control of the prevention" of flooding as contrasted with mere prevention of flooding."

A further reference was to *Blake v. Grand River Conservation Authority*, March 20, 1992, (unreported) with regard to precedence, Deputy Commissioner Yurkow stated that:

"The Authority concedes that the effect of Blake's proposal is minute and may not be measurable. It argues that many such encroachments would increase downstream peak flows. Blake concedes that his proposal would limit flood storage capacity, albeit, insignificantly."

If the argument of insignificant affect were allowed, there would be no limit to the number of small incursions into a flood plain area: none on its own harmful but, in total, potentially devastating. It is accepted that some incursions are socially desirable and outweigh the harmful effects. The Authority argues, and I accept the argument, that each incursion decreases the tolerable loss of storage capacity."

Mr. Wigley indicated that policy is important to the tribunal's decision and that point has been acknowledged many times in many decisions. The TRCA Policy document is quite clear that this kind of filling is not permitted. The policy does allow for minor filling, but the amount of fill that was dumped in this case is substantially more than that which could be considered minor.¹

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¹ Roughly 30 cubic metres would be considered minor, although that figure is not written in the policy.

In addition, Mr. Wigley stated that the tribunal has a responsibility to have regard to the Provincial Policy Statement. He reminded the tribunal of a statement made in *Gies v Grand River Conservation Authority*, (unreported), July 14, 2000, in which it was made clear that the tribunal considers:

“The following Legislation, Provincial Policy Statements, Implementation Manuals and Watershed Plans provide the framework within which the tribunal must make its decision.”

The same would apply to any hearing before the Mining and Lands Commissioner.

In conclusion, Mr. Wigley asked the tribunal to find as fact that 10,360 cubic metres of fill was placed in the valley (soccer field area) resulting in a loss of storage creating a negative effect on flood storage capacity of the Etobicoke Creek in this area. *“We have extremely limited storage capacity in this area, the fact is we don’t have enough, and this Authority is not prepared to use up limited storage capacity on this proposal.”* (Transcript #2 – P. 224)

FINDINGS

Introduction

It seems to the tribunal that it is only common sense that tells us to not develop in or alter a valley system unless extremely serious reasons exist. But it also seems that common sense is not enough, despite watching all the damage that water has done to lives, the economy and to property over the years. It appears that we must observe a menace such as Hurricane Hazel to take this impact seriously. The recent Hurricane Sandy almost afforded us that impact. Unlike New York and New Jersey, Ontario got off very lightly.

It is the **Conservation Authorities Act** that provides the law to enforce the common sense that is needed in order to deal with the potential dangers of water. The **Act**, therefore, is the starting point for this Decision. Conservation Ontario’s website tells the history of the conservation movement in Ontario:

*“Historically, the **Conservation Authorities Act** was legislated by the provincial government in 1946 in response to the concern expressed by agricultural, naturalist and sportsmen’s groups who pointed out that much of the renewable natural resources of the province were in an ‘unhealthy state’ as a result of poor land, water and forestry practices during the 1930s and 1940s. The combined impacts of drought and deforestation led to extensive soil loss and flooding.”*

Following the enactment of the **Act** in 1946, many Conservation Authorities were established. By the time Hurricane Hazel occurred in Ontario in October, 1954, these Authorities were in a position to record data with regard to flood flow rates and depths. This data highlighted the need for greater management and control of water in all of the river systems in Ontario.

The **Act** enunciates the rules or laws that every Authority and the tribunal must follow in carrying out their work and making decisions. In summary, the relevant ‘rules’ relating to the OKDI appeal are:

- Subsection 20(1) outlines the Objects which basically are “*to establish and undertake a program to further the conservation, restoration, development and management of natural resources*”.
- Subsection 21(1) establishes the powers granted the Authority in order to accomplish the objects
 - “(a) *to study and investigate the watershed and to determine a program whereby the natural resources of the watershed may be conserved, restored, developed and managed;*
 - (j) *to control the flow of surface waters in order to prevent floods or pollution or to reduce the adverse effects thereof;*
 - (p) *to cause research to be done;*
- Subsection 28(1) of the **Act**, has the greatest relevance to the main focus of Conservation. It is the **Conservation Authorities Act** and the subsequent Regulations that provide the guidance to the Tribunal in issuing a finding in the OKDI appeal.

Authorities

Subject to the Minister’s approval, an authority may make regulations that are applicable in its area of jurisdiction:

- “(a) *restricting and regulating the use of water in or from rivers, streams, inland lakes, ponds, wetlands and natural or artificially constructed depressions in rivers or streams;*
- (b) *prohibiting, regulating or requiring the permission of the authority for straightening, changing, diverting or interfering in any way with the existing channel of a river, creek, stream or watercourse, or for changing or interfering in any way with a wetland;*
- (c) *prohibiting, regulating or requiring the permission of the authority for development if, in the opinion of the authority, the control of flooding, erosion, dynamic beaches or pollution or the conservation of land may be affected by the development;”*

ISSUES

Issue #1: What is the relevance of the Provincial Policy Statement (2005), The Regulations and any approved Policies and Programs of the Conservation Authority?

The issue of the relevance of the **Provincial Policy Statement** to the decisions made by the Mining and Lands Commissioner has been discussed many times and full acknowledgment has been given to its directive of “shall have regard to” the **PPS**. In a recent decision, *Fox v Grey Sauble Conservation Authority*, November 8, 2011, (unreported), this tribunal acknowledged the importance of the **PPS** and the direction given to provincial commissions and boards under subsection 3(5) of the **Planning Act** to have regard to policy statements such as the **PPS**.

Part 1V: Vision for Ontario’s Land Use Planning System intertwines the natural environment with the planned environment and emphasizes the need for the involvement of conservation authorities in the process. The **PPS** focuses growth within settlement areas and away from human-made and natural hazards, especially “*where these hazards cannot be mitigated*”. (p. 3)

“The Province’s natural heritage resources, water, agricultural lands, mineral resources and cultural heritage and archaeological resources provide important environmental, economic and social benefits. The wise use and management of these resources over the long term is a key provincial interest. The Province must ensure that its resources are managed in a sustainable way to protect essential ecological processes and public health and safety, minimize environmental and social impacts and meet its long term needs.” (p. 3)

Mr. Hanchard provided an excellent overview of the relevance of this policy to the TRCA and other conservation authorities. He noted that the **PPS** is “*the voice of the province with respect to the intent on planning matters to deal with issues in a consistent manner*”. The need for consistency in dealing with applications is accepted by the tribunal as essential to the fairness of the process.

The tribunal again finds that the **PPS** is a relevant part of the evidence to be examined and to be given “regard to” in deciding this case. The principles enunciated provide the tribunal with a level of guidance as to Provincial views with regard to the importance the Province places on issues such as flood control. On behalf of the Minister of Natural Resources, the tribunal accepts those views as important guidelines to follow.

The second set of documents the tribunal will reference are the Provincially adopted Regulations. The following is an extract from Conservation Ontario’s web site which outlines the status of Regulations within the process:

“Through these regulations, CA’s are empowered to regulate development and activities in or adjacent to river or stream valleys, Great Lakes and inland lakes shorelines, watercourses, hazardous lands and wetlands. They ensure conformity of wording across all CA’s and complement municipal implementation of provincial policies under the Planning Act such as hazardous lands and wetlands.”

Subsection 28(5) of the **Act** outlines the areas of the province where development regulations can be approved. It is important to note that the over riding Regulation 97/04 was approved by the Minister of Natural Resources and the Lieutenant Governor in Council. In order to ensure conformity of wording and consistency, in 2006, the Minister further approved the individual "*Development, Interference and Alteration Regulations*" for all Authorities. It is Regulation 166/06 that applies to the TRCA. (approved on May 4, 2006)

The TRCA's Ontario Regulation 166/06's full title is *Toronto and Region Conservation Authority: Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses*.

To this point, the tribunal has acknowledged the **Act** as the major source of law to be followed. The tribunal also acknowledges *Ontario Regulation 97/04* as providing direction and authorization for the Regulations adopted by Conservation Authority in the province. The tribunal further finds that *Ontario Regulation 166/06* is the guiding document in the development review process used by the TRCA and hence has the same status with the tribunal.²

The document outlines the areas under the jurisdiction of the TRCA where "no person shall undertake development". The areas in the regulated limit are mapped and include hazardous lands, wetlands, shorelines and areas susceptible to flooding, and associated allowances within the watersheds.

The Regulation also outlines where the Authority may grant permission for development "if, in its opinion, the control of flooding, erosion, dynamic beaches, pollution or the conservation of land will not be affected by the development." The words, "in its opinion" are significant to any decision made by the TRCA. The tribunal, in the *Fox v Grey Sauble Conservation Authority* spoke to this point.

"The tribunal finds that the underlined words in the above paragraph are most significant in this and any other decision. Flexibility is provided, but the decision is still left to the Authority (and this tribunal) as it 'may' give permission 'if in its opinion' approval should be granted. These documents have all been developed in accordance with proper regulatory processes." (p. 27)

It is the interpretation and the implementation of these regulations that has an impact on the words 'in its opinion'. The regulation lists the issues which must be dealt with, if permission is to be granted. The Permission to Develop sections of Ontario Regulation 97/04 are general in nature and provide little detail for the Authority or the tribunal to make a decision. A tribunal 'may' allow development if they believe, 'in their opinion', it is advisable.

Fox v Grey Sauble Conservation Authority went on to discuss the next step in the process:

"The logical step is to develop a set of policies that provide some consistency in decision making for every application that comes forward".

² It is noted that Schedule 1 of the Regulation designates Hurricane Hazel as the regulatory storm.

It is policies which provide guidelines for the Authority and now, the tribunal, in coming to a decision regarding the present application. The relevant TRCA Policy document is the *Valley and Stream Corridor Management Program*, dated October 1994. As noted earlier, in order to accomplish the objects of an Authority, Subsection 21(1) of the **Act** gave the Authority the power:

“(a) to study and investigate the watershed and to determine a program whereby the natural resources of the watershed may be conserved, restored, developed and managed;

The tribunal has acknowledged that regard will be given to the **PPS** as the “voice of the province” in the area of policy regarding natural resources.³ The tribunal accepts the right and in fact the responsibility to develop Policy documents in order to provide a “voice” for the smaller unit - the watershed and in the case of the TRCA, the watersheds. The object of the *Valley and Stream Corridor Management Program*, therefore, was to develop, through study and investigation, a program to carry out the direction of the **Act**. Whether it is called a program or a policy, it does not matter. The tribunal views these words as interchangeable. The TRCA program was approved by the full Conservation Authority Board and provides to the Authority staff, and to municipalities and land owners alike, consistent direction with regard to Authority requirements as to its approach to the ‘conservation, restoration, development and management of the natural resources within its jurisdiction.’(Ex.21-Tab1-p.1). Without these Policy documents, only the words of the Regulation would be available. At that point, opinion would rule. Policies, based on experience and knowledge, are developed to avoid this.

A further program, Flood Plain Mapping Program, was developed under Ontario Regulation 166/06 and adopted by the Authority in January, 2011. Map Sheet #20, along with all the other Authority watershed maps, describes areas where development should be prohibited, regulated or require permission of the Authority. (Ex. 11) Map #20 shows the Etobicoke Creek area in question, exhibiting the latest regulatory floodline, based on 2005 aerial photography and survey work on the ground (digital). An earlier map also was submitted (Ex. 12A) showing the floodline in 1978. These maps were reviewed extensively in determining the changes that have occurred over time in this watershed.

The tribunal finds these six documents to be relevant to the decision regarding the OKDI lands, beginning with:

- the confirming law – the **Conservation Authorities Act** and proceeding to implementation with
- the master Regulation – **Ontario Regulation 97/04**
- the TRCA Regulation – **Ontario Regulation 166/06**
- the major Provincial Policy - **Ontario Policy Statement** – 2005 (under review)
- the major TRCA Policy - **Valley and Stream Corridor Management Program**
- the floodline maps - **Flood Plain Mapping Program**

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³ In addition, the tribunal is aware of a Ministry of Natural Resources publication, entitled “*Understanding Natural Hazards*”, dated 2001. (Exhibit 21-Documents Book of Respondent). This document provides more insight into the terms used and the policies enunciated in the **Provincial Policy Statement**.

The relevant sections of these documents will be discussed in dealing with the more specific issues.

Issue #2 Is there valid evidence that ‘cut and fill’ operations took place in and near the Khalsa lands, sufficient to produce a net gain in storage capacity in the Etobicoke Creek valley?

There are four areas where the appellant maintains that a ‘cut and fill’ operations took place, resulting in a net gain in storage capacity.⁴

This opinion was based on Mr. Mahadeo Singh’s ‘comparison calculation study’ between the 1976 floodline and the 2005 floodline, using the 1976 official mapping (Sheet #20). Both manual and auto-cad processes were used to determine the net gain or loss of storage capacity. Cross sections were established in order to carry out the measurements. Although Mr. Singh references the 2005 mapping, he continually stated that he used the 1976 approved mapping as the basis for his comparisons being the only ‘official’ mapping available and had not used the updated 2005 mapping as the base because it was not yet ‘official’. The tribunal finds this difficult to accept, since Mr. Singh was apparently made aware of the availability of the 2005 mapping, even though it was not officially approved at the time of his study. The changes that have occurred in the watershed over the almost thirty year span would be substantial and in the tribunal’s view, the failure to even review and/or use the updated mapping information presents a substantial weakness in the comparative analysis and in Mr. Singh’s evidence overall. The updated Map 20 was approved on January 7, 2011 and since this is a hearing *de novo*, the appellants had time to do an analysis using the 2005 mapping in an ‘official’ capacity.

1. City of Mississauga Lands

These lands are located on the east side of Dixie Road immediately across from the OKDI site. They are also immediately downstream of the Dixie Road Bridge. Mr. Singh maintained that the comparison study resulted in a net gain of 85,217m³ in capacity between 1976 and 2005. (Exhibit 4e) The tribunal notes that Exhibit 4e does not have a legend to indicate what each of the various coloured lines represent making it difficult to interpret. The ‘Regional Floodline before excavation’ is marked for both the 1976 and 2005 time period. The 2005 contour identifier inset map is shown in an enlarged manner on the same exhibit. The tribunal notes the considerable changes in the contours from the 1976 inset to the 2005 map, most of which appear to have been due to some work being carried out to provide proper drainage of the site and its use as parkland.

The tribunal found Ms. Farrell’s evidence with regard to the mapping itself important in understanding the accuracy of the two Map Sheets, both marked 20 but of two dates – 1976 and 2005. She indicated that the potential elevation change could be considered to be within the tolerance level of the 1976 mapping. She indicated that the map sheets are accurate to within .5 metres, either way (plus or minus) with a greater accuracy being seen in the 2005 mapping, but again, the 2005 mapping was apparently not utilized.

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⁴ One of these is on an adjacent property

The tribunal agrees with Mr. Wigley's comment that the only way any gain in storage could have occurred on this piece of land was if the soil had been removed from the area when the park was created. This action would have required a permit from the Conservation Authority and according to Ms. Farrell, there is no record of such a request being made or a permit being issued. Mr. Singh acknowledged that he did not check with either the City of Mississauga or the TRCA as to whether such action occurred. The tribunal believes that any action to remove enough fill to create such a gain would be noticed by the TRCA and the public. Since no witnesses were called nor any documents submitted to substantiate that fill removal occurred, the tribunal finds that the appellant's evidence with regard to the Mississauga lands will be considered hearsay and of questionable value in furthering any argument regarding the existence of extra storage capacity in this part of the Etobicoke watershed.

2. The OKDI Driveway/Entrance

Initially, access to the OKDI lands was through an old farm lane from Dixie Road, immediately south of the Dixie Road bridge. Due to the increased activity on the site, this access has been improved and a signalized intersection created. Mr. Singh indicated that he had been informed by 'people' connected with the OKDI organization that in order to create an acceptable access, soil had been removed from the area outlined on Exhibit 4c. Mr. Singh's comparative analysis estimated that the 1976 storage capacity was 18,483 m³ and a 2005 capacity of 41,355 m³, providing an increase in storage capacity of 22,872 m³. This was determined by the initial comparison work showing that 872 m³ of fill was added but 23,770 m³ was cut from this area, resulting in net cut volume figure of 22,770 m³.⁵

No date was given as to when the driveway work was undertaken and Mr. Singh has only someone from the OKDI group telling him that some fill was removed and some deposited, leaving the supposed balance. Mr. Singh was not working with OKDI at the time the driveway activity apparently took place, so he has no first hand knowledge about this matter. In addition, there is no record of OKDI seeking permission from the Authority to carry out work in the valley for driveway purposes.

Mr. Singh's Exhibit 4 maps, describe a line as 2005 mapping, but he continued to state that he used the 'official' 1976 mapping in his work. The tribunal, in comparing Ex. 4 to Sheet 20, (2011/01/07) finds that Mr. Singh's '2005' line does not conform with, Map Sheet 20 as to the location of the Regulatory Floodline. Map 20 appears to take the floodline up and through the actual OKDI temple building and totally includes the driveway area. Again, it is these inconsistencies that cause a problem for the tribunal with regard to the validity of the evidence provided.

3. Soccer Field Area

In order to understand the mathematical evidence provided by the Appellant with regard to the cut/fill issue, the tribunal reviewed both the oral and the written evidence provided by both parties. Exhibit 2 - Tab 2 appears to be the material provided to the TRCA Executive

⁵ Mr. Singh has been liberal with his math, adding 30 m³ to his total.

Committee during the appeal in September 2010. During his evidence to the tribunal, however, Mr. Singh indicated he had revised his findings with respect to the cut/fill issue. Mr. O’Kane stated (Transcript #1 – p. 69) that “*he [meaning Mr. Singh] noted that there were differences in elevations that he couldn’t understand or explain, that is, that there was more excavation that had been removed from the property that had never been accounted for*”. It was at this point that Mr. Singh apparently ‘discovered’ the earlier removal of fill from the soccer field area, the driveway area (#2 above) and also the apparent removal of fill from the lands owned by the City of Mississauga (#1 above), resulting, in his opinion, in an increase in storage capacity. A supplementary report, identified as Ex. 3b was submitted in July 2011 to the tribunal during the Motion Hearing. This report was added to the exhibit list as number 7 – “Affidavit of Mahadeo Singh”, dated July 18, 2011.

With regard to the soccer lands, Mr. Singh stated that the elders of the OKDI had indicated to him that the floodplain was leveled and that a significant amount of soil was removed around 1996 to create the original playing field and to assist in leveling a parking lot on the tableland. The result of these actions (which did not have a TRCA permit) was the creation of greater flood storage.

In order to prove his argument that the 2009 soccer fill actually was the continuation of an earlier cut and fill exercise, Mr. Singh had to first determine how much fill was actually placed on the soccer site. To do this, he stated that he compared the TRCA 1972 base mapping with the ‘after fill’ OLS field survey carried out for OKDI in December of 2009 by the Land Survey Group Inc.⁶ and the preliminary TRCA 2007 mapping which would provide the ‘before fill’ grades. These three basic comparisons were used throughout all of his analysis.

In reviewing the earliest submission, first the ‘*Presentation to the Executive Committee*’ section of the Singh report (Ex. 2 Tab 2-page 8) the tribunal found that Mr. Singh’s conclusions are based on the average estimated elevation over the soccer fill area from “*the TRCA mapping for the 1972 and 2007 and the OKDI survey in 2009*”. He calculated that “*5900 m³ of fill*” was removed “*at the time of the construction of the OKDI*” in order to create the soccer field initially in 1995-6 and to adjust the parking lot and about 8,200 m³ of fill was added in the recent upgrade.⁷ This part of the report concluded that:

“If the fill that was removed in 1995 [5900 m3] was accounted for, the net filling in floodplain is approximately 2,300 m3. This is an insignificant volume in comparison to the total storage within the watercourse, and it is expected that no impacts to flooding and flood storage would be significant.” (p.8)

The tribunal found another set of figures discussed on page 14 in the ‘*Notice of Appeal*’ section of the Singh report (Ex. 2 - Tab2) stating that 5,900 m³ of fill was removed, and 8,610 m³ of fill added resulting in a net fill amount of 2,710 m³. This is not a substantial difference, but it produces another inconsistency in the report. It is at this point, when Mr. Singh produced a supplementary report. (Exhibit 3b from the 2011 Motion Hearing).

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⁶ Another name was used elsewhere in the report as the authors of the survey. The tribunal assumes they are one and the same, but this adds to the list of discrepancies in the evidence.

⁷ This is a different figure than the agreed amount of 10,360 m³ of fill that has been placed in the soccer field area.

The soccer field is totally within the floodplain and is used as a play field, a use that is allowed. It has been agreed that the depth of the deposited fill in the soccer area was .85 metres consisting of 10,360 cubic metres in volume. The appellant contends that in both this and the previous situation, fill was both removed (cut) in the 1993-96 time period (for use in creating the tableland parking lot) and placed (fill - 10,360 m³) on the 'soccer' lands, resulting in a difference between the two amounts that they classify as minor.

Exhibit 4b deals with both the soccer field and the driveway area while Ex. 4c shows the separation of the soccer field from the driveway. The data indicates a storage gain for both sections (#2 and #3) of 22,872 m³ between 1976 (18,483 m³) and 2005 (41,355 m³). With the driveway calculations removed, Mr. Singh maintains that the storage gain for the soccer field area would be 15,879 m³, on the basis of the alleged past fill removal (cut). Since 10,360 m³ of fill was placed on the site (this figure was accepted by all parties), there would be a net storage gain of 5,519 m³. (tribunal's math)

The tribunal notes that the comparison work done by Mr. Singh to determine his net gain finding was based on the three components:

1. the TRCA 1972 base mapping
2. the 'after fill' OLS field survey carried out for OKDI in December of 2009 by the Land Survey Group Inc.; and
3. the preliminary TRCA 2007 mapping which would provide the 'before fill' grades.

The tribunal finds Ms. Farrell's evidence that Mr. Singh's review of the storage issue through cut/fill was not an appropriate analysis, of interest. She also indicated that the mapping itself was not created for a cut/fill comparison purpose and should not be used for detailed analysis. It has only an accuracy level to delineate flood lines for the purposes of 'management' and is used to compare broad-scale changes in the watersheds. It is noted that the map sheets are accurate to .5 metres and that is recognized as being either plus or minus. A total station survey would be needed to secure accurate mapping.

In the case of the soccer field area, the OKDI did carry out, in 2009, what can be described as a total station survey after the fill was in place. However, based on Ms. Farrell's evidence, the tribunal is of the opinion that there is doubt with regard to the accuracy of any of the storage figures used by Mr. Singh. Certainly, there have been no total station surveys done except with regard to the soccer field, but the fact that the floodlines themselves can be inaccurate to a certain degree, makes the ability to quote any accurate comparisons as to flood storage problematic.

In addition, Mr. Hanchard's evidence regarding past fill removal is compelling, since it is based on facts and the record of violation notices and clearances. His Witness Statement indicated that Mr. Singh's evidence regarding the removal of fill from the playing field is incorrect. He indicated that the fill actually was actually removed in 1993 (not 1995) "*in response to a violation*" notice. (Ex. 3 –Tab 3 – Para 33) "*In fact, all unauthorized fill was*

removed from the floodplain and the original floodplain grades were restored". As a result of this information, the tribunal accepts another 'in/out' situation resulting in the latest intrusion as being wholly fill of 10,360 m³ with no cut involved.

4. Channel Improvement Area in Meander Belt

Mr. Singh was involved in the 2005 stream bank rehabilitation project. Over the years, erosion had occurred creating an almost vertical slope. It appears that the OKDI, in attempting to expand the parking lot closer to the top of the valley in 1994-95, apparently pushed fill into the valley system. In response to a violation notice, the tribunal accepts that this fill was all removed, at that time, resulting in another 'in-out' situation with no gain or loss.

Filling again occurred in 2004 and the OKDI was required to remove that fill, which they did, again with the same result of no gain and no loss.

OKDI was required, however, to stabilize the bank to a 2 to 1 slope. Mr. Singh indicated that it was during this work that the storage gain occurred, due to the removal of approximately 2,000 m³ of fill. Mr. Singh maintains, in Exhibit 4a, that new storage, amounting to 1,900 m³, was created in the meander belt to secure the required 2 to 1 slope as well as establishing a five metre set back.

Exhibit 4d provides the cross sections for this area and it is on these drawings that Mr. Singh's argument is based. The overall plan indicates an area marked as 'Fill to be removed', adjacent to the 'stream', but the amount to be removed is not shown. The cross sections from A to D are marked and the individual A-A and B-B cross sections are enlarged on this same plan. These two areas received most of the fill that was 'dumped'. Pre and post fill surveys were done by Terraprobe, at the request of the TRCA.

The tribunal finds that Terraprobe's conclusions are extremely relevant to the issue of storage gain at this meander location. The fact that the pre and post fill 'slope crest' or 'top-of-bank' *"are generally similar"* indicates to the tribunal that there is no strong indication of any change in storage - either as a gain or a loss. In addition, the direction *"that the fill removed to retrace the original, native till slope"* was to be (or was) carried out under the direction of a geotechnical engineer. Further, the Singh report states that the remedial work was to *"Restore the creek to its existing condition"* before the fill was placed. (Ex. 2-Tab 7- Section 2.2) Section 9 of this same report reiterated this requirement by stating *"in addition to the removal of all fill that violates the authority regulation, and restore the creek to existing conditions"*. By meeting these conditions, there could be no storage gain as the fill had had to be all removed.

Despite agreeing with these statements and that the OKDI had basically given directions to not remove any more soil *"than that which constitutes the violation"* Mr. Singh continued to maintain his belief that a storage gain existed, one that would off set the fill on the soccer lands.

The tribunal does not accept that a storage gain was created in the meander belt area and finds the Terraprobe's conclusions compelling. In addition, Mr. Wigley's cross examination of Mr. Singh regarding his drawings in Exhibit 4 and Exhibit 2 caused the tribunal

to question his evidence regarding the alleged soil removal in the meander belt. He continually agreed with Mr. Wigley's questions about the location of the top and toe of the bank agreeing at one point that they had removed the fill to the existing condition but not agreeing there was no new storage. He was unable to convince the tribunal that there was a storage gain in this area.

The tribunal found the TRCA evidence regarding the tolerance factor to be a relevant. The quarter of a metre tolerance is used when interpreting the photography. This factor is important to remember in analyzing any floodline mapping such as the contour Map 20 data. The 1976 mapping apparently has a greater tolerance factor than the more recent digital photography and since Mr. Singh's calculations used the 1976 mapping, (despite the updated information available to him) the tribunal cannot support his findings with regard to the Mississauga lands, the entrance and the meander belt lands. There is some support for possible additional storage on the soccer field since a station to station survey appears to have been undertaken, but the tribunal finds Ms Farrell's evidence regarding the validity of the use made by Mr. Singh of the mapping of more importance. If these contour maps have not been designed to deal with a cut and fill scenario, the tribunal finds it difficult to accept Mr. Singh's calculations as anything but a possibility. In addition, it became apparent that Mr. Singh never actually reviewed either the old or newer photography used to prepare the maps. He relied solely on outdated figures.

A discussion did occur with regard to the suggestion that land owners could take advantage of a method of storage banking. The TRCA did not see this as an acceptable policy as there would be no consideration given to future flow increases in such a system, nor to cumulative effect, which will be discussed later. The tribunal believes the future flow issue to be valid but the banking question itself is considered a non-issue.

The existence of conflicting reports created a problem in the hearing. Although not submitted with the original evidence package, there was a report submitted to the tribunal during the earlier motion for dismissal hearing, held in 2011. (Exhibit 7) This report dealt with the details or facts of the fill appeal and its content were not relevant, at that time, to the decision regarding the motion. The change in direction of the Appellant was not initially apparent. As a result of the appellant appearing to argue in two directions, the tribunal believes that the Appellant basically offered two scenarios to choose from. One scenario is that extra storage has been found in four places as described above and that that storage off sets any fill recently placed on the soccer field. This scenario, as noted, has not found favour with the tribunal.

The second scenario purports that any extra fill found on the soccer field should be classified as minor. It was Mr. O'Kane who raised the issue of the definition of 'minor' in the TRCA policy. This scenario is based on the alleged fill removal some years ago for the use on the table land parking areas, resulting in the calculation of 15,879 m³ less the 10,360 m³ placed on the soccer field, leaving an excess of fill of 5,519 m³. It is this figure that the Appellant regards as minor. According to Mr. Hanchard, however, this assumption was found to be incorrect. (see site #3 above)

As a result of this scenario, the tribunal believes it necessary to address the issue of what can be considered minor. The TRCA and the Appellant had agreed that 10,360 m³ of fill had been placed on the soccer field area in 2008. According to Mr. Hanchard, this would be

equivalent to about 1000 standard dump truck loads of fill. There is no definition of minor in the *Valley and Stream Corridor Management Program* as it relates to the flood storage issue, but Section 4.2. – E (p. 43) states:

“To this end, property improvements and ancillary structures associated with typical appurtenances such as fencing, decks, stairs and minor alterations to grade/landscaping may be permitted subject to and in compliance with the following:

1) if located within the Regulatory Flood Plain the location and design must:

i) not result in unacceptable impacts to flood storage and conveyance;

ii) not create or aggravate flooding on adjacent, upstream or downstream properties;

iii) minimize property damage associated with flooding to the extent technically possible and the liability be assumed by the owner;”

So development would be allowed if considered minor under this statement and if it could meet the test, the most relevant part of the test being Section 1) i) dealing with unacceptable impacts. As has been stated, the TRCA believes there will be an unacceptable impact but beyond that basic premise, there is the question of how to view minor. Mr. Hanchard indicated that the TRCA, based on over fifty years of experience, uses approximately 30 m³ or less as the standard by which they judge minor or smaller scale applications. Ms. Farrell stated that it could be up to 50 m³. In either case, this amounts to about one or two dump truck loads of fill. If Mr. Singh’s estimate of 5,519 m³ of excess fill in Scenario 2 was accepted, this still would amount to approximately 475 to 500 dump truck loads. The tribunal does not accept such an amount as ‘minor’. It might be wise for the TRCA to amend their policy statement to clarify this issue.

The tribunal, in summary, does not accept any of the supposed storage scenarios, as submitted by Mr. Singh, as providing valid evidence regarding a net gain or loss in storage capacity in this section of the Etobicoke Creek Valley. In effect, this issue has become a minor one in the tribunal’s decision. Whether there is a gain or a loss has become less important than the issue of flows and future flows and the impact of any fill on the valley system to be able to contain the flood flows of a Regulatory storm and even some of the lesser classified storms.

Issue #3: Were the appropriate flow figures and other data utilized by the Appellant in preparing the report regarding flood storage?

The Appellant maintained that the soccer field fill will have little impact on the flood volumes of the Etobicoke watershed. The HEC-RAS model numbers used by Mr. Singh were 1997 figures provided by the TRCA. (Ex. 2- Tab 9). They represent a flow figure of 389 cubic metres per second at a flood elevation of 176.50 metres. (the 2005-8 figure) Again, Mr. Singh maintained he had no choice but to use the approved 1996-97 data. He was aware that the 2008 data shows the downstream flows as 604.5 cubic metres per second at a flood elevation of 175.95 metres, but maintained that the information was in draft form only. He did admit that if he had been applying for a permit in 2009, he certainly would have used these figures. He also admitted that he had not gone beyond looking at the 1998 figures in order to make any assumptions about the future changes that would have occurred physically in the watershed...such as extensive urban development....that would have an impact on the volume of water and thus on the flow rates.

The tribunal is of the same opinion as expressed in the discussion of Issue 2. Just a review and use of the 1996-7 numbers to determine the flow conditions in 2008, 2009 or 2010 is inadequate, especially since this was a 2012 *de novo* hearing. The use of up-to-date 2008 figures, which were available, would have been important in presenting the Appellant's case. Mr. Singh did not dispute the list of considerations put forward by Mr. Wigley regarding the composition of a floodplain management plan, (Page 7- Reasons) but he also did not submit any rebuttal evidence to indicate why he did not appear to see the need to take these points into consideration, especially with regard to existing and future flow rates.

Mr. Wigley's list of issues that should be considered in any Floodplain Management Plan and by conservation authorities in their roles as floodplain managers, needs to be examined as they have an impact on the OKDI application. The tribunal understands that this list is not exhaustive, but certainly includes those issues that the TRCA finds to be the most relevant in this case. Whether the tribunal accepts these issues for the purposes of this decision needs this further consideration.

The first three issues on the list need to be considered as whole. They were:

1. The valley needs to be managed from the point of view of the flooding that may occur;
2. The valley needs to be managed according to existing circumstances; and
3. The valley needs to be managed as to what happens in the future;

The evidence provided by the TRCA spoke to the need to take the whole watershed into consideration as well as the need to deal with existing circumstances in order to be able to develop proper scenarios for future expectations. If the area upstream changes substantially over the years, it is obvious that the impact of flooding will change. The tribunal is aware of the amount of development, both of an industrial and residential nature, that has occurred north of the OKDI site in Brampton and Mississauga. In 1957, most of that area was agricultural. By 1976, there was a huge amount of agricultural land but, it was on the verge of mushrooming development. In 2012, there is still land in the watershed that is planned for development. The impact will continue in the future. Mr. Singh utilized the 1976 data to develop his arguments and in the tribunal's view, the data provided as evidence does not deal with the present or the future. By suggesting that the impact of the soccer field fill is minimal or minor, there is also no acknowledgement of the impact on the watershed as a whole. The tribunal accepts that what can be predicted in the future is essential for the control and management of Ontario's rivers in order to be in a position to advise the public as to the potential damage and life threatening events that have and will continue to occur, as well as implementing a warning system to provide such advice.

The next four issues concern the physical features of the valley and the impact of the depth, volume and velocity of flooding:

4. The depth of flooding and its potential increase must be considered;
5. The volume and velocity of the flooding and the potential increases must be considered;
6. The contours must be examined; and
8. The existing storage capacity must be determined.

These issues are the basis for developing the HEC-RAS numbers. The numbers then provide the data in order for the TRCA staff to plan and manage the watershed in flooding conditions.

Ms. Farrell's evidence in section 12 of her witness statement stated that with any storage loss anywhere in the system:

"I do not agree with the consultant's position that the conveyance of the Etobicoke Creek is essentially unaffected as a result of the fill. If storage is removed from the floodplain, there will be a change in the way the flood waters move through the valley system. This change will occur through changes in the depth of flood, the velocity of the flood waters, and also the time it takes flows to travel the reach" (or section of creek in question).

Ms. Farrell indicated that Mr. Singh's model was acceptable with regard to upstream impacts, but the report's contention that there would be no downstream impacts "*is beyond the scope and abilities of the model/tool employed*" by Mr. Singh. She indicated that standard engineering practice recognizes that removing floodplain storage by filling will definitely have an impact upon flood elevations downstream. She stated that the HEC-RAS hydraulic model is effective in predicting water levels but "it is limited in its ability to model all of the complex interactions and processes involved in channel hydraulics". The Appellant did not offer any rebuttal to this opinion.

Ms Farrell also dealt with the impact of the timing of flood flows within the watershed as a whole. Due to the number of tributaries and the actual location of the rainfall, flows could gradually make their way into the main creek flood area and dissipate so that little damage would occur. On the other hand, the tributary flows could converge with great force at the same time. This could force the flood waters out of the flood plain more than they are at present.

Again the TRCA's evidence shows that the flood line level has risen since 1976 when it was at 174.5 metres and the flow rate was 389 cubic metres per second. A comparison of the Floodline Mapping (Sheet 20 and Sheet 20 Revised) Exhibits 12 A represents the 1976 floodlines while Exhibit 12 B represents the 2005 flood lines. It is apparent to the tribunal that by 2005, the floodline was at the 176.50 contour and it was noted that the flow rate had increased to 453 cubic metres per second. The floodline has moved outward and is actually washing up (line goes through) against the Temple building itself indicating that more storage is naturally being sought by the river. As Ms Farrell stated, an increased flow leads to an increased floodplain. She indicated that future flows could be approximately 610 cubic metres per second, just downstream of the OKDI property. It is within this context that the Authority must manage the watershed in order to be prepared for this flow increase.

The tribunal found it ironic that the Appellant's witness would suggest that because the flow rate has increased and the area flooded has increased, that the TRCA was not doing its job as manager, but then request forgiveness for placing fill in the valley system, an action that would assist in increasing the flow rate and floodplain level even more in the future. Mr. Singh's report stated that the OKDI questioned the reason for the increases and stated:

“This should not be as TRCA should have protected the Khalsa lands from such increase that are a direct result of increased urbanization upstream and ineffective storm water management measures.”(Ex. 2-Tab 9)

The criticism actually outlines the exact reason that the TRCA is attempting to control filling within the watershed as a whole and to manage the system in order to alleviate any future impact as much as possible.

Issues 7 and 9 of the management list deal with the impact of existing and future road structures crossing the valley as well the rate of change of the physical environment itself.

The rate of development that has occurred in the Greater Toronto Area (GTA) has been phenomenal since the big push began in the early fifties of the last century and, as stated above, that development continues to push to the northern boundaries of the GTA watersheds, including the Etobicoke system. This development has drastically changed the face of the area. The two lane gravel roads with ditches to collect and retain runoff for longer periods of time have become four lanes, and sometimes six, concrete roadways drained into a storm sewer to move the runoff faster to the river’s floodplains. Every subdivision covers former agricultural land and forests with houses, or industrial buildings, impermeable surfaces of roads, bridge structures, parking lots, driveways and sidewalks....all surfaces being constrained by this development and again being drained quickly into storm sewers and into the river system.

A discussion took place concerning the damming effect created by the Dixie Road bridge crossing. It was noted that during a Regulatory Storm, this major roadway would be inundated with floodwaters to the extent that access to the OKDI property would be lost for a period of time. In addition, emergency vehicles would be forced to find alternate passage, either north to Brampton or south to Mississauga. Beyond this problem, the Dixie Road bridge itself will hold back the natural flow of the creek, increasing the depth of the flood waters on the site, resulting in an increase in the velocity of the water as it flows downstream. The tribunal believes that it is unlikely that this bridge will be replaced in the near future to allow for a natural flow, and therefore, this effect will only be exacerbated.

Mr. Singh submitted a substantial amount of information and provided a number of opinions to the Authority staff and to the tribunal, with regard to his belief that there was little or no impact on the valley system by the fill placed in the soccer field, especially downstream of the site. The discussion of the above management criteria indicates that the TRCA looks beyond the past and as far as possible uses the present day data to assist in determining the future. Based on this review, the tribunal cannot accept Mr. Singh’s arguments, which were based on outdated information with no apparent effort made to rectify the information prior to this hearing. His actual technical work did not even include the impact of the fill under discussion.

In addition, the tribunal finds that the most compelling evidence with regard to this issue relates to Ms. Farrell’s statement concerning these impacts. She stated that it was beyond the scope of and the abilities of the model or tool used by Mr. Singh to make such a statement. Removing floodplain storage by filling the valley will definitely have an impact on downstream flood elevations and flows. The tribunal understands this to be the reason that the

TRCA's policies do not allow fill within the regulatory floodplain nor do the other documents the tribunal has reviewed, except under limited circumstances. Those circumstances do not exist in this case.

The tribunal undertook a thorough review of the technical issues submitted by both sides in this appeal. It is impressed with the technical expertise demonstrated by the TRCA witnesses and finds it prudent to adopt and apply their data in making its findings as opposed to that submitted by the Appellant. Mr. Singh's method in producing the report did not go far enough forward in time. The tribunal believes that it was essential to use the most current data available in determining the impact of the soccer field fill. To do otherwise is basically to ignore the history of past encroachments into the valley system at this site and elsewhere. As a result, the tribunal finds that, in this case, the appropriate flow figures and other data were not used by the Appellant in preparing the submission to the tribunal, and it ignored the impacts of the watershed's dynamic growth.

Issue #4 What is the impact of the TRCA Policy document on the tribunal's decision?

The issue of the weight of policy documents in tribunal decisions is an important one. To this point in this decision, the tribunal has firmly based the direction of the **Conservation Authorities Act** as determining the law in these matters and the Regulation as directing the technical method by which flood lines and flow volumes are determined. A policy and any technical manuals prepared by the Province and/or by the Authority, however, do provide guidelines that are relevant to the tribunal's ability to determine the merits of any development proposal. They are not, however, exclusive of the tribunal's ability and responsibility to exercise its independent jurisdiction in deciding the matter. All the TRCA policies flow from the direction of the **Act**.

The goal of the 1994 *Valley and Stream Corridor Management Program* is stated on page 5 of that document (Ex. 21-Tab 1):

"To undertake an valley and stream corridor management program to prevent, eliminate or reduce the risk to life and property from flooding, from erosion or river banks and from valley slope instability;

The tribunal accepts this mandate as a direction, derived directly from the **Conservation Authorities Act** and the Regulations.

The principles direct (in summary):

- management within the watershed as a whole – from the headwaters to the river's mouth;
- protection of the watercourse and landforms within the valley corridor;
- concern for incremental and cumulative impacts of land uses and the changes occurring both in the valleys and on the tableland;

These principles are embodied in the goal and provide the direction the Authority must follow in order to fulfill its mandate. The first two principles above were referenced in the discussion of what constitutes a basic Management Plan (Issue 3).

In the case of the OKDI application, the tribunal believes that Section 2.2.2. B) states the issue and the position of the Authority in clear terms.

“To prevent development that negatively impacts on the natural landform, functions and features and/or affects the control of flooding, pollution or conservation of land within valley and stream corridors.”

Section 3.2.1. C) is also relevant:

“Alterations of valley corridors through such activities as filling or enclosure shall not be permitted to create additional useable area and/or to accommodate development.”

Section 4.1.2. A) states:

*“The Authority encourages the public and private use of valley and stream corridors only for such uses that are compatible with their landform, features and functions such that:
- existing topography is retained;”*

The OKDI believes that the soccer field is an existing use and therefore not new development. It appears that work was done to create a flatter surface for play purposes, sometime in the past, without any permit from the Authority (mid nineties). This was rectified, but the fill in this application is new fill and an alteration of the landscape has resulted in an alteration of the existing topography. This is considered development and the tribunal views this as a new feature. The existing topography has been altered to create an improved soccer field and therefore, the existing topography has not been retained. Because the use is passive does not negate the impact both on site and downstream that this fill and fill placed in any other part the valley will have on the overall floodplain management process. The Etobicoke Valley system appears to be in high risk due to the loss of storage over the years. As a result, the tribunal accepts that any loss of storage will have an impact.

The TRCA is not objecting to the use for soccer purposes. In and of itself, the reason for filling in the field might be laudable, but the impact that will occur did not need to occur. As has been discussed, other methods could have been followed if the proper discussion had taken place with the TRCA. In this instance, the OKDI project does not meet this policy.

The tribunal notes that Mr. Hanchard did indicate that a much better use of the floodplain would be plantings of some sort, which would assist in reducing the velocity of a flood and therefore, assist in the management of the watershed to a much greater degree than an open, bare field. However, the use is permitted since it is passive in nature and no buildings are present. It is the development that is not permitted.

Section 3.2.2. C) iii) (page 20 of Policy) states:

“There will be no upstream or downstream impacts on the control of flooding as a result of changes to flood storage and conveyance characteristics.”

The Authority has provided enough evidence to dispute the Appellant's submission that the impact does/will not exist. Sheet 20 distinctly indicates that there is an increase in the area sought by the creek to store the flood waters. Mr. Singh's data did not explain why this was happening. If there had been an increase in storage, as submitted by Mr. Singh, the flood line presumably might have been at a lower level. The studies done by Mr. Singh did not show or even predict an impact downstream, while TRCA data exists that does indicate that such an impact is expected in both the volume and velocity of flow. The model used by Mr. Singh was not designed to determine this information, and it was not investigated further to assist the tribunal towards any acceptance of the Appellant's position. The increase in the level of the Regulatory Storm on the OKDI property demonstrates that changes to the conveyance characteristics of the flood flow will have an impact on both the OKDI property and the lands downstream. This fact results in another inability of the project to meet the Authority's policy.

As noted, the tribunal has accepted that the TRCA has the right, and in fact, the responsibility through the **Act** to develop guidelines or policies to assist their staff in providing consistency in their actions and decisions. These policies in effect become codified opinions. Because of this document, everyone has a basic knowledge of what they can expect from the Conservation Authority. Each individual application is reviewed under the same set of documents.

After considering the TRCA's *Valley and Stream Corridor Management Program Policy* document, the tribunal finds that the policy provides it with an in-depth underpinning to the evidence submitted by the TRCA. It appears to the tribunal, that by attempting, first of all, to seek a finding that the fill is minor in nature and then later, attempting to show that some sort of cut and fill balance had been achieved that actually increased the storage on the site, the Appellant was attempting to fit somewhere into the Policy. The tribunal does not find that they succeeded.

The tribunal is aware of the discretion it has in making a decision regarding this application. It acknowledges that the TRCA has spent many years both developing and implementing their adopted policies. The tribunal also acknowledges their considerable technical expertise in this highly complex and important work. Early in the hearing, the appellant raised, but did not pursue, the issue as to whether policies should guide decisions by the Authority or the tribunal. The tribunal, however, reviewed a great deal of technical evidence submitted by both sides and finds that, in this case, it is essential to complete the picture by an acknowledgement and acceptance of the TRCA's policy document as strongly compelling to the tribunal in the exercise of its decision. Therefore the tribunal finds that it will adopt the relevant policies included in the TRCA's *Valley and Stream Corridor Management Program* and apply them to this decision. Through its own past experience, the tribunal is aware of the need for such policies and believes that the matter of consistency and fairness by a government body is required, both in fact and in perception. On the facts of this case, the tribunal could find no compelling reason or evidence to persuade it to deviate from this finding of adoption and application of the TRCA policy to the facts of this appeal.

Issue #5: Would an approval create a negative precedent for the TRCA and other Conservation Authorities?

In a previous decision, the tribunal referenced the Oxford Dictionary (Seventh Edition) to secure the meaning of the word “precedent”. It is described as a “previous case taken as example for subsequent cases or as justification”. Every time there is an attempt to justify approvals on the basis of the application being minor in nature or “this little bit will have little or no impact on the storage capacity of a valley”, a problem is created for the approval body, being either the Authority or the tribunal. It is not just a problem of the cumulative effect or the chipping away in this case of floodplain storage, it is the problem that the impact on storage loss increases each time and once an application is granted, there is no way of getting that storage back. The tribunal has spoken on this issue many times in the past and has recognized the pressure that would be placed upon the Authority if the issue of cumulative effect is ignored and a precedent was set. The issue of precedent is bound up with the issue of cumulative effect.

In *Hope v. Rideau Valley Conservation Authority*, January 18, 2006, (unreported) as an example, the tribunal stated on page 30:

“The issue of precedent setting is a common, but important, reason given by Conservation Authorities both in reviewing and deciding an application. The tribunal accepts that a consistent policy is required in making decisions. If this is not done, it becomes extremely difficult to refuse any application, no matter the size or location. The precedent of inconsistency would be set. Local policies would basically become unenforceable.”

The tribunal also acknowledged and supports the words of Commissioner Ferguson in *Nagy vs. MTRCA*, March 19, 1979, (unreported) where he talked about precedential effect:

“In addition, serious emphasis was placed on the precedential effect of granting permission. The final words in section 4 of the regulation illustrate that in the granting of permission under section 4, the significant consideration is not the prevention of flooding but the broader concept of an interference with the control of flooding. It is this broader concept that issues of precedent become significant. While the individual case may not cause significant flooding, the consideration of the application must relate to the broader concept of control of flooding and whether the granting of permission would create a precedent that could not be distinguished on its permits in subsequent applications.”

This statement from 1979 has not lost its applicability to the situations today. It is that broader concept where “*issues of precedent become significant*”. While the amount flooding within the OKDI land may not be significant, the control of flooding within the reach and its impact downstream is significant.

In the OKDI case, the tribunal has accepted the TRCA’s argument regarding the validity of the data provided by the Appellant. It was not complete, nor up to date, causing the

tribunal to find this unacceptable. The increased volume and flow expected over the next ten to twenty years must be managed and preparations and actions need to be taken to accomplish this.

The cumulative effect of 'small' or 'minor' amounts of fill adds another problem to the mix. It does not matter that it might be small. It is the cumulative effect in itself that sets the precedent and highlights the need to look at the watershed as a whole and not one small section.

The tribunal finds that the OKDI proposal would have a negative precedent on the TRCA's ability to manage and plan for the future. Such a precedent would have an affect on all other Authorities in the province as well and the management of watersheds is too important an issue to be ignored.

CONCLUSIONS

All the documents examined by the tribunal, including the transcripts themselves, spoke to the fact that development should not be permitted in a floodway in those cases where the facts prove that it affects the control of flooding. The Etobicoke watershed has a history of extensive development and that development is not yet complete. The TRCA was established to examine and evaluate that prospective development from a holistic perspective, whereas an applicant presents its case from the narrow point of view of one property within the system. The tribunal finds that it is imperative that the watershed be as well managed as possible to keep future flooding within the floodway or valley itself. This can be done only if the existing storage is not depleted further. This may be an uphill battle, but it is one that must be faced.

Mr. Wigley was correct in asserting that the tribunal's decision must be made based on examining it, at least, from the point in time when the application was made in 2009. Using 1976, 1998 or 2002 figures to analyze the future flood volumes and flows was insufficient. The tribunal must look to the future and anticipate the impact.

This application to place fill is, in effect, an application to retain the fill already in place. It is unfortunate that the OKDI did not discuss and take advice from the TRCA before proceeding with the project. It is hoped that that lesson will be learned this time.

Based on the fact that the land in question is located in the valley proper, the tribunal finds that the impact on the long term storage capacity of the reach and the watershed as a whole will be negative. The tribunal respectfully suggests that the OSCJ consider ordering the removal of the fill. In addition, the tribunal suggests that the OKDI undertake another manner of improving their soccer field to the benefit of their members with technical assistance and permission from the Toronto and Region Conservation Authority.

The appeal will be dismissed.

Counsel for the respondent will be directed to file a written submission on costs with the tribunal and with counsel for the appellant within approximately 45 days of the issuance of this Order.

Counsel for the appellant will be directed to respond in writing to the aforementioned submission within a further 15 days after the filing of counsel for the respondent.