Canadian Environmental Law Research Foundation
La Fondation canadienne de recherche du droit de l'environnement

suite 303, one Spadina Crescent, Toronto, Ontario, M5S 2J5, telephone (416) 928-7156

CELRF/FCRDE

RN: KE109-5-5028
FN: 6-03-9599-000-0497
Contract #OSS5-0529

POLLUTION FROM LAND USE ACTIVITIES

REFERENCE GROUP

LEGISLATIVE STUDY

INTERIM

REPORT NO. 1

URBAN AREAS.

by J. F. Castrilli
May 12th, 1976

C O N T E N T S*

* A table of contents precedes each Part, with a Notes Section at the conclusion of each Part.

PART ONE

PLUARG

URBAN AREAS

FEDERAL CONTROLS

TABLE OF CONTENTS

I. OVERVIEW

A review of federal statutes revealed several possibilities for their utilization in controlling construction and stormwater runoff from new urban development. Federal fiscal statutes can, under present language be used to stimulate local authorities to initiate plans for controlling sedimentation and erosion, as a future criteria for obtaining federal funds for new development. Some few examples of this type of federal activity were reviewed by the contractor. Federal proprietary statutes, because they generally provide powers of construction on federal property, can provide the basis for the federal government to set an example and develop techniques for controlling runoff pollution in its activities. Federal jurisdictional statutes can, because of the broad quality of their pollutant definitions and prohibitions, provide the basis for vigorous inspection and enforcement for new development generated pollution. In practice, however, fiscal stimulation and proprietary example were found to be in their infancy, while evidence of use of jurisdictional muscle was found almost not at all.

II. Federal Fiscal Measures

A. Existing

1. National Housing Act[1]

a. Purpose and Administration

This Act is designated as one to promote the construction of new houses, the repair and modernization of existing houses, and the improvement of housing and living conditions. The Secretary of State for Urban Affairs is designated the Minister for the purposes of the Act. Central Mortgage and Housing Corporation, a crown corporation, is charged with administration of the Act. For the purposes of this study, the key division under CMHC is the Municipal Infrastructure Division.

B. Key Provisions

Under Parts VI and VI.I of the Act,[2] the CMHC may, following agreement between the federal and a provincial government, undertake jointly with that provincial government or its agency, activities directed towards the creation of new projects and new communities. In conjunction with the respective province, the powers of the CMHC include, the acquisition of land for, the planning of, and the designing and installation of utilities and other services for the project or new community. Loans may also be made available

for such land assembly projects. Where land acquired has also been used for recreational and new community planning purposes, 50 per cent of the loan used for such purposes may be forgived payment by the CMHC.

- Under Part VIII of the Act,[3] in order to assist in the elimination or prevention of water and soil pollution, the CMHC may make a loan to any province, municipality or municipal sewerage corporation for the purpose of assisting in the establishment or expansion of a sewage treatment project. Pursuant to amendments made in March 1975, and in order to encourage comprehensive land use and residential development in previously underdeveloped areas the CMHC, may at any time before April 1, 1980 make a loan to any province, municipality or municipal sewerage corporation for the purpose of assisting in the construction of a trunk storm sewer system. "Trunk storm sewer system" is defined in the Act as a system for the collection and transmission of storm drainage. The CMHC may, where the establishment or expansion of a sewerage treatment project or the construction of a trunk storm sewer system is completed to its satisfaction, forgive 25% of the principle of the loan and 25% of the interest that has accrued as of the date of the completion of the project.

Comment

(i) A reading of the relevant portions of the Act reveal several interesting possibilities vis-a-vis the prevention and control of runoff pollution. Under Part VI regarding land assembly and new communities, it is conceivable according to CMHC officials, that the CMHC could condition its funding participation in such activities, on the province or municipality requiring or adopting sediment and erosion control plans and by-laws for all new urban developments. This option, however, is not actively being considered or pursued by CMHC pursuant to Parts VI or VI.I. Moreover, these Parts do not provide for any part of a loan to be forgiven except with respect to lands developed and set aside for recreational uses and the planning of new communities. Some doubt may therefore be expressed as to whether monies or loans could be partially forgiven if sediment and erosion control plans and concomitant monitoring and inspection were required by CMHC, as a condition to loan availability, without amendment to the Act itself. Since monitoring and inspection is a key to whether sediment and erosion control plans will prevent runoff pollution, municipalities may well find themselves unable to police such a requirement without some form of aid forgiveness. [4]

(ii) As was noted above, the March, 1975 amendments to Part VIII of the Act permit CMHC to make loans for the construction of trunk storm sewers. "Trunk sewers" are defined to include systems that "collect and transmitt" storm drainage. Canvassing of CMHC officials indicates that "innovative" collection techniques such as sediment ponding, containment and other on site detention techniques can, as a result of the March 1975 amendments, now be funded as well. Mentioned were two projects, one in Winnipeg and one in the Ottawa area, where on site detention was or is in the process of being incorporated into the design activities funded by CMHC pursuant to this Part. Information available to the contractor by CMHC officials further indicates that up to 8-10% of the monies made available for such projects can be used for design and supervision measures. It was regarded as conceivable, therefore, that some of these monies might be made available for monitoring purposes at least during certain phases of the construction activity. This might therefore speak to some of the concerns regarding inspection and monitoring, raised in the discussion under Part VI. However, 25% of the loan is as much as CMHC may forgive under this Part. If municipalities needed more of the loan forgiven in order to viably undertake monitoring during the construction phase, then an amendment to the Act would be required.

(iii) While these quantity stormwater control techniques are being considered, and funded on a limited basis by CMHC, funding for quality or treatment control of stormwater is still not permitted under the Act. However, CMHC officials indicated awareness that treatment control might also be necessary. In this regard, pursuant to Part V of the Act, [5] research is being undertaken with S.C.A.T. committee funds [6] for the Municipal Infrastructure Division, to determine the costs and methodology to be used in treating stormwater on a national basis. Further information was unavailable on this project at the time of writing.

(iv) Up to March 1975, it might fairly be said that CMHC's funding of sewerage projects was directed toward eliminating the point-source pollution aspects associated with such projects. At the same time, to the extent that monies were being made available under Part VIII for sewerage projects associated with expected new urban development (indeed if such new urban developments were not being stimulated by monies available for such sewerage projects) Part VIII might be said to have encouraged non-point source pollution from new construction activity. To the extent CMHC still only funds the former (ie sewerage plants) and traditional trunkstorm sewer systems, it continues to subsidize the more diffuse aspects of water pollution associated with construction activity. [7]

2. Regional Development Incentives Act [8]

a. Purpose and Administration

The Act is described in its preamble as one to provide incentives for the development of productive employment opportunities in regions of Canada determined to require special measures to facilitate economic and social development. The Minister of Regional and Economic Expansion is designated the Minister for the purposes of the Act. The key branches in Ontario Region include the Regional Development branch which must, react to applications by firms for assistance to locate in less than optimal locations; and recognize and promote regional development opportunities that may be broader in scope. The Regional Analysis branch is involved in the negotiation of the general development agreement with the province as well as provide economic evaluation of both broad regional opportunities and specific developmental projects. The Programs Implementation and Coordination branch is responsible for the implementation of subsidiary agreements.

b. Key Provisions

- The Minister has the power to authorize the provision of a development incentive in whole or in part but he must take into consideration the probable cost of preventing or eliminating any significant air, water or other pollution that could result from the establishment, expansion or modernization of a facility under consideration.[9]

Comment

(i) Section 6(d) on a simple reading of the language would seem to suggest to the uninitiated that the Minister in considering water pollution aspects of a proposed facility must consider all phases of possible water pollution including construction phase runoff pollution. However, the Act as it has been interpreted and implemented by DREE officials reveals a narrower purview. A review of a DREE standard form Letter of Offer [10] reveals the following. Under a heading entitled "optional paragraph to be used re pollution abatement", the letter of offer states that "it is a requirement of this authorization that pollution abatement facilities for this project be incorporated and utilized which meet the specifications set by appropriate regulatory agencies". It is clear from this quotation and from further discussion with DREE officials that the emphasis in the letter of offer is on abatement at the operation phase only. While section 6(d) is quite broad, though perhaps subject to differing interpretation as to its breadth, the letter of offer developed by DREE has narrowed the focus of pollution concern down to one of operation phase not construction phase pollution.

Perhaps this merely reflects the present thinking of the relevant provincial and federal environmental agencies in terms of their requirements, or at least as those requirements have been communicated to DREE officials to date.

(ii) Of equal, if not greater consequence for this study are the DREE General Development Agreements (GDA) and Subsidiary Agreements. (SA) As it is understood the GDA in Ontario is not part of any statutory base or part of the Regional Development Incentives Act. Rather, the Ontario GDA, and the SA's that follow from it are made pursuant to an Order in Council. [10a] The objectives of a GDA are to improve opportunities for productive employment; encourage socioeconomic development; and reinforce policies and priorities of the Province for regional development in designated areas. [10b] The GDA thus becomes the vehicle for permitting subsidiary agreements (SA's) to take place which are site specific and conform with GDA goals. [10c] Among the things that the Canada/Ontario GDA permits in subsequent subsidiary agreements is that the Ministers may consider the "effect on the environment" of a particular proposal. [10d] Subdiary agreements reviewed by the contractor [10e] made no direct reference to how, or which environmental factors would be taken into consideration in the formulation of the agreement. Of course, the normal review procedures of particularly the Ontario Ministry of Environment might require consideration and mitigation of runoff from construction and related activities. However, the agreements themselves and discussion with DREE officials indicate that environmental concerns or at least runoff pollution concerns were not explicitly reflected in the agreements. It is conceivable that environmental controls including stormwater runoff and construction site runoff controls could be required in themselves in future as a condition to DREE participation. It is submitted that such requirements should be made explicit in the agreement. This is especially necessary as the entire process of General Development and subsidiary agreements is without specific statutory base.

III. Federal Proprietary Measures

A. Existing

1. Government Harbours and Piers Act[11]

a. Purpose, Administration and Key Provisions

The Act is concerned with commercial and federal marine facilities not under the jurisdiction of independent harbour commissions including breakwaters, piers and those harbours. The Minister of Transport administers commercial marine facilities. The Department of Environment is responsible for federal marine facilities predominantly used by commercial fishermen, sports fishermen and recreational boaters. This responsibility is the Small Craft Harbours Branch's of the Fisheries and Marine Service. It is understood that DOE has complete responsibility for management, administration and control as well as construction and repair for marine facilities under its jurisdiction. Responsibility for Ministry of Transport marine facilities including construction and repair thereof remains a Department of Public Works responsibility.[12] Further information on programs with possible runoff implications to follow including scale of development and construction activities and present and proposed construction phase water pollution migitation measures.[13]

2. Public Works Act

a. Purpose, Administration and Key Provisions

The Department of Public Works administers this Act. The Department is essentially the federal government's "consulting engineer" on many, if not all facets of construction and maintenance of federal property. The Minister has the management, charge and direction of the following properties belonging to Canada; the dams, hydraulic works, the construction and repair of harbours, piers and works for improving the navigation of any water; roads and bridges; public buildings and other properties belonging to Canada, which are/were built, constructed or enlarged at federal government expense.[14] As noted above, DOE has taken over DPW's responsibility for construction, maintenance and repair of all federal facilities predominantly used by commercial fishermen, sports fishermen and recreational boaters. As well DOE assumed responsibility for public works associated with commercial fishermen, sports fishermen and recreational boaters as well as the Marina Policy Assistance Program and the Tourist Wharf Program pursuant to the Government Harbours and Piers Act. Information was unavailable at the time of writing with respect to the magnitude of DPW construction activities

and present and proposed construction-related pollution and control measures. It is understood, for example, that presently DPW is engaged in a program of constructing federal facilities, mostly postal offices and buildings, in rural areas.

3. Public Lands Grants Act [15]

a. Purpose, Administration & Key Provisions & Regulations

This Act permits the Govenor in Council to sell, lease or otherwise dispose of any public lands including lands the disposal of which is not otherwise provided for in the law, and to make regulations authorizing a Minister having the control and management and administration of any such public lands to sell, lease or dispose of them, subject to any conditions the Governor in Council may prescribe.[16] Pursuant to this power the Small Craft Harbours branch of DOE may enter into long-term leases with the provincial government, municipalities and private developers. [17] Further information to follow where available, and pertinent.

b. Proposed

1. Fishing and Recreational Harbours Act [18]

This proposed Act would consolidate those responsibilites already administered by Fisheries and Marine Service, Small Craft Harbours Branch with respect to the administration and development of certain fishing and recreational harbours in Canada. The Act would not apply to any Harbour, works or property under the National Harbours Board or any of the harbour commissions or have effect upon the powers and duties of the Ministers of Transport and Public Works.[19] The Minister would be permitted to undertake projects for the acquisition, development, construction, improvement or repair of any harbour to which the Act applies.20 The Minister would be permitted to enter into agreements with provinces or with individuals to provide for any of the undertakings enumerated in section 5(1). [21] The Governor in Council would be permitted to make regulations prescribing the terms and conditions of such agreements entered into.[22] Enforcement Officers may enforce any part of the Act or regulations including requiring production of documents from any person on the premises to which the Act or regulations apply. [23] No person may obstruct or mislead an enforcement officer in the carrying out of his duties or functions or violate the regulations.[24] Such offence upon summary conviction is subject to a fine not to exceed $25,000 or to imprisonment for a term not exceeding six months or to both. [25] No minimum fine or prison term is provided for.

Comment

This proposed Act would give the federal government control over construction in such harbours to the extent that pursuant to terms and conditions made under the regulations, controlling construction related pollution could be required in agreements with the province or private contractors or developers.

IV. Federal Jurisdictional Measures

A. Existing

1. Government Organization Act [26]

This Act established Environment Canada and gave it the responsibility to protect and enhance the quality of Canada's air, water and soil.

2. Fisheries Act[27]

a. Purpose and Administration

The Act's purpose, when read in its entirety is to protect, conserve and preserve fisheries under the jurisdiction of the Government of Canada. The Act is administered in the Province of Ontario by the provincial Ministry of Natural Resouces, in accordance with an agreement made in 1899.

b. Key Provisions and Prohibitions

The Act forbids any person from depositing or permitting the deposit of a deleterious substance into water frequented by fish or in any place under conditions where such deleterious substance or any other deleterious substance that results from the deposit of such deleterious substance may enter any such water.[27] The Minister may require the production of plans and specifications regarding proposed works to be constructed, altered or extended where the operation of such works may result in the deposit of a deleterious substance. The Minister, if he is of the opinion that the deposit of the deleterious substances is likely to occur, may require modification of the plans, the compliance with which may be inspected for, or he may prohibit the construction activity.[28]

c. Other Features

Prosecutions by private citizens that lead to convictions, permit the sharing with the citizen of fines imposed;[29] a limitation period of two years is permitted for the commencing of prosecutions;[30] the court can in addition to imposing a fine order the offender to cease and desist from such activity if it is likely to result in the commission of another similar offence;[31]

regulations may be made respecting pollution of any waters frequented by fish.[32]

Comment

A reading of the relevant provisions of this Act makes clear that the broad quality of the statutory language would permit prosecutions for construction site runoff or stormwater runoff generally that caused a sedimentation or other problem deleterious to fish or fish habitat. Moreover, the provision for the submission of plans and specifications is a potent tool and broad enough to permit the relevant authority to require any measures to be undertaken that could be related to protecting fish. Since sediment and other pollutants can be generated by construction activities, and are likely to be deleterious to fish, it might be possible for the relevant authority to require sediment and erosion control plans to eliminate this problem. Discussion with DOE officials indicates that since 1970 there have been 150 prosecutions under the prohibition section 33(2) and that 115 of them have taken place in British Columbia. In 1974/75 there were four prosecutions taken in Ontario by the Ministry of Natural Resources but little is known about the fact situations surrounding the offences. Information available to DOE officials indicates that there have never been any prosecutions under the Act for what are ostensibly non-point sources of water pollution. They agree however, that the statutory language of the Act is broad enough to permit such prosecutions.

3. The Canada Water Act[33]

a. Purpose and Administration

The purpose of this Act is to regulate water on a national scale through cooperation with provincial governments, and to set nationwide standards of environmental quality. This responsibilit falls on the Department of Environment and in part the Environmental Protection Service.

b. Key Provisions

There are two main provisions. 1) It impowers the federal government to make agreements with the provinces to provide for comprehensive water resource management projects related to any waters in which there is a significant national interest.[34] Where all reasonable efforts to achieve co-operation with a province fail, the federal government may undertake unilateral management projects in respect to interjurisdictional, international or boundary waters.[35] 2) Once a region has been designated as a water-quality management area either by federal-provincial agreement or by federal unilateral action, the deposit of waste of any type in its waters or in any place where waste ultimately may enter waters becomes an offence[36] subject to a $5,000 maximum (no minimum) fine.[37]

Comment

Because no "water quality management areas" have been prescribed in the area covered by this study, the Act is of no application. Such a prescription could be done at anytime, of course.

B. Proposed

1. Fisheries Act Amendments

Comment

It is understood from discussions with DOE officials that amendments to the Fisheries Act are forthcoming. While a full text of the amendments was not available at the time of writing it is understood that; the definition of "fish" will be expanded to include "fish eggs";[38] that fish habitat areas adjacent to land will receive greater protection from land use activities that have the potential for depositing deleterious substances in such habitats. When the proposed amendments are available greater detail will be provided where appropriate.

V. OTHER LEGISLATIVE MEASURES

1. The Criminal Code[39]

a. Common Nuisance[40]

A common nuisance for the purposes of this section is committed either when one does an unlawful act or fails to discharge a legal duty and thereby endangers the lives, safety, health, property or comfort of the public or when one obstructs the public in the exercise or enjoyment of any right that is common to all subjects of her Majesty. The maximum penalty for this indictable offence is two years imprisonment.

Vl. AGREEMENTS AND NON-STATUTORY PROGRAMS

1. Canada-Ontario Agreement on Great Lakes Water Quality (1971)

a. Urban Drainage Subcommittee

i. Purpose

The Urban Drainage Subcommittee (UDS) was established as part of the research program for the abatement of municipal pollution, pursuant to the above noted agreement.

ii. Terms of Reference

The terms of reference include; defining the magnitude of the pollution due to stormwater in the Great Lakes basin; establishing priorities and schedules for studies directed toward potential solutions to stormwater pollution problems; developing a stategy for implementing solutions.

iii. Development of a Manual of Urban Drainage Practice

The goal of this project as it relates to the UDS program is to compile a manual outlining the ramifications and practice of urban drainage control concepts that would be of value to municipalities, town planners, contractors, consultants and government agencies. It is anticipated that the project will generate a manual outlining procedur for implementation of runoff controls for new urban developments. The manual is expected to include; a statement of policy objectives; techniques and methodologies and suggested municipal by-laws. The project is not quite on stream yet but is expected to be completed by March 77.

2. Environmental Assessment and Review Process (EARP)[41]

a. Purpose, Administration and Application

The Environmental Assessment and Review Process (EARP) is an administrative procedure of Environment Canada for identifying and evaluating all potentially significant environmental effects of proposed government projects that are either federally funded, federally initiated or for which federal property is required.

b. Provisions and Procedures

The initiator of a proposal within the federal government is "encouraged" but not required to seek early DOE advice on the potential environmental effects of its project. The initiator decides on the significance of the environmental effects whether or not it has sought out such advice. The initiator may use existing knowledge, short-term studies to determine these effects or not consider such matters at all. If it decides that the effects are or will be insignificant it proceeds with the project without further reference to the process. Presumably it can proceed even if it found that effects were likely to be significant

If the initiator or proponent on its own or with DOE advice determines that the project has potentially significant environmental effects the project is submitted for scrutiny to a Panel or to a screening committee within DOE. Significance can be evaluated on the basis of whether a project is seen to be a likely cause for concern, professionally or from the public. The screening committee also has the capacity to determine which projects go on to the Panel for further consideration and the possible issuance of guidelines for an environmental assessment. The initiato may appoint a member to the Panel that will consider the issuance of guidelines. If the initiator or proponent submitted an initial environmental evaluation it may be reviewed to see whether it would qualify as an environmental assessment capable of providing reasoned conclusions to a decision maker.

In most cases the Panel will issue specific guidelines for the preparation of an assessment. The Minister of Environment and the initiating Minister may deny the public access to such guidelines.

A completed assessment may or may not be made available to the public. If it is the public may respond and the Panel hold a hearing.

The Panel will make recommendations to the Minister and the Minister will consult with the initiating Minister for the purposes of determining the projects future, whether go, no go, or go with modifications.

Surveillance and monitoring may be carried out during, the final design stage; the construction stage; the operation stage.

Comment

Part of the process of determining construction runoff or stormwater runoff as a potential pollution problem is something the EARP process can positively address. This is so because it is designed to address broad questions of environmental impact at an early stage when remedy is possible. However, because of the considerable discretion an initiating or proponent agency has to ignore the process the benefits of the process will frequently be lost. A review of the approximate 360 projects registered in the EARP process to date, reveals for example, that only one CMHC project and four DREE projects in Ontario have been registered. Further information is not yet available to th contractor to determine how many of both agency's total programs have not been submitted to EARP. Clearly, all such projects would have problems of construction or stormwater runoff. It appears, from discussions with DOE officials that the one CMHC registered project happened almost by accident and that the DREE subsidiary-agreement program is one that DREE officials are still reluctant to submit to the EARP. Moreover, the relative insulation of the process from the public eye, further reduces opportunities for addressing environmental matters at an early stage; including pollution from runoff.

NOTES

1. R.S.C. 1970, c.N-10 as amended.

2. Public Housing and New Communities respectively. Especially Sections 40, 42, 43, 45.1, 45.2 and 45.3

3. Sewerage Projects. See especially sections 51 and 52.

4. See discussion under municipal controls.

5. Housing research.

6. Costs of the study are approximately $75,000.

7. See, for example An agreement between CMHC and Ontario Ministry of Environment, "Schedule amounts of Funds for sewerage treatment in Ministry of Environment Capital and Trunk Works Program", July 75.

8. R.S.C. 1970, c. R-3 as amended.

9. Section 6(d).

10. See Department of Regional and Economic Expansion, Standard Form letter of offer to Prospective recipients of a Development Incentive. Clause 9.

10a. See Order in Council P.C. 1973-14/3799 of December 11, 1973 and Order in Council O.C. 521/74 of February 20, 1974. These authorize the Minister of Regional Economic Expansion and the Treasurer of Ontario and Minister of Economics and Intergovernmental Affairs to enter into such agreements.

10b. Department of Regional Economic Expansion, General Development Agreement, Canada/Ontario, February 26, 1974, s.3.

10c. See, for example, Department of Regional Economic Expansion, Subsidiary Agreements, for Cornwall (February 26, 1974); Dryden (March 24, 1975) and Parry Sound (March 16, 1976) respectively.

10d. Supra note 10b, section 6.2(g).

10e. Supra note 10c.

11. R.S.C. 1970, c. G-9 as amended.

12. Section 5.

13. R.S.C. 1970, c. P-38.

14. Section 9.

15. R.S.C. 1970, c. P-26.

16. Section 4(a)(b).

17. SOR/74-520 (Canada Gazette, Part II).

18. To be introduced for 1st reading in June 1976.

19. Section 3.

20. Section 5(1).

21. Section 5(2) and 5(3).

22. Section 9(i).

23. Section 11.

24. Section 12.

25. Section 20.

26. R.S.C. 1970, c. F-14 as amended by (1st Supp. c. 17).

27. Section 33(2). "Deleterious substance" is defined quite broadly under section 33(11). However, the deposit of a deleterious substance that is harmful to fish eggs only is not an offence under the Act. (See proposed amendments to the Fisheries Act below). R. V. Stearns Rogers Engineering Co. (1974) 3 W.W.R. 285 (B.C.C.A.) The Trial Court found that silt which was placed or put in Water by the activities of a bulldozer was a "deleterious substance" within the meaning of s.33(11). See further, Contribution of Sediments and other Pollutants to Receiving Waters from Major Urban Land Development Activities, R. L. Walker Assoc. for EPS, Environment Canada, April 1974, pp 16 and 65.

28. Section 33.1 (1) and 33.1 (2).

29. SOR/73-46, Penalties and forfeitures Proceeds Regulations.

30. Section 64 (in 1st Supp ints c. 17 s.8).

31. Section 33(7) and in 1st Supp. its c. 17 s. 3(2).

32. Section 34 (h).

33. R.S.C. 1970 (1St. Supp). c.5

34. Section 4.

35. Section 5.

36. Section 8.

37. Section 28.

38. Presumably to overcome the problem that occurred in the Stearns Rogers Case, supra, note 27.

39. R.S.C. 1970 c. C-34.

40. S. 176.

41. The EARP Process, As of April 1976.

42. See, for example, "First Federal "EARP" Impact Study: Too Little, Too Late", 4 Canadian Environmental Law News 209 (1975). Regarding the Point Lepreau Nuclear Power Plant Construction, permit-granting and federal funding activities that took place prior to the use of EARP.

PART TWO

URBAN AREAS

PROVINCIAL CONTROLS

TABLE OF CONTENTS

I. OVERVIEW

The control of water pollution from urban area nonpoint sources, necessarily involves regulation of the use of land. Such power traditionally rests with the province, which may delegate some part of that function to local municipalities, while retaining final decision-making power itself. This tradition of Cabinet or Ministerial responsibility is reflected not only in planning legislation, with nonpoint control potential, but in existing pollution control enforcement legislation as well. Proposals to systematically address stormwater and construction runoff problems are intended to fit into one or both of these traditional legislative models. Provincial legislation reviewed by the contractor is sufficiently general to likely permit the incorporation of such initiatives as a matter of policy. However, with respect to prospective performance, it would appear from discussion with officials and a review of the literature, that storm and construction site runoff control requires especially vigorous inspection and monitoring to ensure compliance. From field investigation it is also apparent that existing agencies, traditionally regarded as natural defenders in this area (eg. local conservation authorities) do not have the resources to adequately meet the tasks required to control runoff in rapidly urbanizing areas. While the principle contaminant from nonpoint sources - sediment resulting from erosion - might be controlled through either a statute which spoke directly to that concern or through enunciated policy to be implemented through existing legislation, one thing it is submitted is likely to be true in either case; legislationtthat is not enforced will not change business as usual. Particularly with this type of pollution is the vigilance of the many of greater benefit than the vigilance of the few. However, Ontario's principle Act for most fully implementing controlled runoff at the planning stage, as well as permitting public input, will not have early application to most new urban development, including housing. Public recourse to the courts to stop pollution, including the runoff variety, or to require agencies to use their broad mandates to do so, is not being considered by officials canvassed as a further tool of contemplated runoff control policies.

II. THE PLANNING FUNCTION

A. EXISTING

1. The Planning Act

a. Purpose

The Planning Act provides a statutory framework for land-use planning and implementation at the local government level. It is a statute of general application to both urban and rural areas.

b. Administration

Now administered by the Ministry of Housing exclusively.[2] A key branch is the Plans Administration Division which has responsibility for review and approval of official plans and amendments, subdivision plans, restricted area or zoning by-laws and providing advice to municipalities on planning matters.

c. Key Provisions

(i) Official Plans

The Minister is permitted, on his own initiative or, upon application by one or more municipalities to establish planning areas within which land use planning is to be carried out.[3] Municipalities must produce an official plan covering such an area[4] and submit it to the Minister for final approval.[5] When a planning area is covered by an official plan, no public work can be undertaken[6] and no by-law passed which doesn't conform with that official plan.[7] While in theory, the official plan, could provide criteria against which the environmental impact of a proposed public work can be measured, in practice, such criteria are rare. The Minister can refer any part of an official plan to the Ontario Municipal Board and its approval[8] has the same force and effect as approval by the Minister. If a person objects to any part of an official plan passed by a municipal council, he can request the Minister, before he approves the plan,[9] to refer any part of the plan to the Ontario Municipal Board. The O.M.B.'s practice has been to hold a hearing to determine the nature of the objection, though it is not required to do so by statute.

(ii) Subdivisions

The subdivision plan is subordinate to the official plan. When a person wishes to subdivide his land and develop all or part of it, he can not convey any part of it until the land is described in accordance with a plan of subdivision which has been registered[10] under The Land Titles Act or under The Registry Act. The plan can't be registered until a draft plan of subdivision has been[11] approved by the Minister. The draft plan must indicate the nature[12] of the existing uses of adjoining land; natural features including[13] watercourses, swamps and wooded areas; the nature and porosity of[15] the soil; the municipal services available or to be available[16] to the land proposed to be subdivided. The Minister can impose whatever conditions to the approval of the plan of subdivision[17] that he considers advisable. But in considering his approval, the Minister must have regard to the following criteria including[18] whether the plan conforms to the official plan; whether the

proposed subdivision is premature or necessary in the public interest;[19] conservation of natural resources and flood control;[20] and the adequacy of municipal services.[21] In addition, any municipality and the Minister may enter into agreements with a subdivider, that impose conditions to the approval of a plan of subdivision which are enforceable against the owner and subsequent owners of the land.[22] An individual can object to the requirement that he obtain a registered plan of subdivision by requesting consent, usually from a committee of admustment.[23] This enables him to subdivide land without a registered plan of subdivision.[24] If the person cannot obtain a consent, or the municipality as well, they may still object to the conditions which the Minister imposed in order to get approval for the plan of subdivision. The objection is heard and decided by the Ontario Municipal Board.[25]

(iii) Restricted Area and Building By-Laws

Restricted area or zoning by-laws and building by-laws may be passed by municipal councils to prohibit the use of land or the erection of structures and establishing conditions for development or redevelopment on any lands in the municipality.[26] Physical development can only occur legally therefore when it is permitted under the by-laws. Development may be prohibited entirely where land is unstable rocky or marshy so that the costs of works, including sewage and drainage facilities is prohibitive.[27] Building by-laws may be passed to closely control practically every aspect of the construction of buildings including their "height, bulk, size, floor area etc...and the minimum frontage and depth of the parcel of land and the proportion of the area that any building or structure may occupy.[28] By-laws restricting the use of land or of structure on land when passed by a municipality must then be approved by the Ontario Municipal Board.[29] Unless no objection is filed, the O.M.B. must hold a public hearing to consider the merits of the application for approval of the by-law and to listen to objections.[30] Land use control by-laws may be established by order of the Minister alone, if he wishes and such an order overrides a municipal land use control by-law to the extent of the conflict.[31] If an individual contravenes a by-law or if a by-law or public work violates an official plan, the violation may be restrained by a legal action launched by the planning board, by the municipality or by any ratepayer, within the planning area where the infringement is taking or has taken place.[32]

(iv) Committees of Adjustment

The committee of adjustment[33] is a local administrative agency which can grant variances from by-law provisions upon application by an affected land-owner. A committee may do so when in its opinion the variance, "is desirable for the appropriate development or use of land etc., provided that in the opinion of the committee the general intent and purpose of the by-law and of the official plan, if any, are maintained."[34] A committee may permit land to be subdivided

without a plan of subdivision if the committee is satisfied that one is unnecessary for the "proper and orderly development of the municipality"[35] A committee must give notice of the application to such persons as it considers proper[36] and is to hold a public hearing within 30 days of receiving the application[37] at which any person who wishes may speak for or against the application.[38] The committee must give its decision with written reasons.[39] Copies are sent to the parties at the hearing and to the Minister[40] and the Minister or any person with an interest in the matter has the right to appeal the decision to the O.M.B.[41] Variances are intended to provide "desirable" exceptions to by-laws without requiring the whole by-law to be amended, a generally much more lengthy procedure.[42]

Comment

Statutes such as the Planning Act, that regulate land use, can indirectly control nonpoint sources of water pollution because of the limitations that they place on where certain human activities may take place. Generally statutes like the Planning Act, and others to be discussed here, are broad enabling Acts, which give some local or other governmental agency the power to regulate land use in a given area by planning, zoning or other by-law techniques and regulations. From a reading of the above, it is clear that the language of the Act is so broad in scope that it should permit the designated governmental unit to control nonpoint sources of water pollution. For example, because official plans establish land use distribution policies and may include phasing and staging of development objectives, they may, when implemented by zoning by-laws, have the effect of limiting the amount of land available for development at any given time. To the extent this will have an effect on the amount of earth disturbing activity taking place in a municipality at any given time, an effect, even unintended, will be limitation of the amount of sediment loss to watercourses. Of course, this staging of development doesn't speak directly to active measures for controlling sediment loss from that earth-disturbing activity that is taking place. The Planning Act also permits five percent of the land included in a particular subdivision plan to be conveyed for parks purposes to the municipality[43] though the municipality may request cash settlement instead.[44] It is understood that such open space requirements can minimize street pollution loads to storm sewers though at the same time contribute to urban sprawl.[45] No information was available at the time of writing from Ministry of Housing officials as to the frequency of municipal acceptance of cash in lieu of park dedication across the province.

It is understood from discussion with Housing officials that the Minister leaves it to the municipality in each case to determine the servicing and other requirements that will have to be met by an applicant. Since the Ministry has no posiiton of policy at present with respect to storm water and construction site runoff control, such matters are only being actively pursued in municipalities where problems of runoff are arising into general public and offical consciousness. Generally, the Ministry and the Ministry of Intergovernmental Affairs

take the position that runoff pollution matters and environmental problems generally, including those generated from Housing policies and programs, are matters to be resolved by the Ministry of Environment. What position Housing may take on runoff control, in private discussions with Environment officials, may produce a different image from the one of passivity on the subject cultivated by Housing officials interviewed by the contractor.[46]

Suffice it to say at this stage, that the powers granted the Minister of Housing, under the Planning Act could have considerable application to controlling runoff across the province. For example, under section 21, the Minister could require any municipality in an area with an official plan to acquire, hold and permit development of land only on condition that appropriate sediment and erosion control plans suitable, say to the Ministry of Environment were promulgated. Discussion with Housing officials indicates that sediment and erosion control could be required by that section but that the Ministry does not presently make that requirement of municipalities. Similarly, with respect to subdivision control, the Minister could as a matter of policy pursuant to his powers under section 33, refuse to approve a draft plan of subdivision or could impose conditions on the approval to require sediment and erosion control plans and measures for controlling storm water runoff as part of every subdivision agreement. Similarly, the Minister could, as a matter of policy object to every committee of adjustment variance which had the effect of evading requirements for storm water control or sediment and erosion control which might otherwise have been imposed by subdivision agreement or other control device.

While the planning process is essentially implemented by municipal decision-making, the powers of the Minister could serve to provide across the board guidance with respect to matters under consideration in this study. It is understood from discussion with Housing officials that only a handful of subdivisions approved in 1975 had any type of storm water controls required as conditions to approval.

2. The Housing Development Act[47]

a. Purpose and Administration

The Act may be said to be aimed at the acquisition and development of land for housing purposes; the construction of housing; the acquisition, improvement and conversion for housing purposes of existing buildings situated in any municipality.[48] It is administered by the Ministry of Housing and the Housing Development Branch.

b. Key Provisions

The Lieutenant Governor in Council is permitted to make and guarantee loans and other moneys to be used in the construction of building development.[49] Notwithstanding any other Act, any municipality in or near where a housing project or building development is undertaken,

may be authorized to do or not do such acts or things as are considered expedient in order to avoid undue delay in the development in the housing project or building development, including the furnishing of municipal services.[50] Any municipality with an official plan that includes provision for housing which has been approved by the Minister, may acquire and hold lands for a housing project; survey, clear, grade, subdivide, service and otherwise prepare such land for the purpose of the project.[51]

Comment

This Act is meant to interface with the National Housing Act and the Central Mortgage and Housing Corporation, in that it permits and encourages the province and municipalities to enter into agreements with CMHC. It might therefore be possible to argue that provisions for provincial funding[52] might similarly be conditioned on proper water pollution control during building and construction activities. It might further be possible with respect to municipal acquisition and land assembly powers for the Minister to condition any such activity on appropriate sediment and erosion control plan implementation. Discussion with Housing officials indicates that there are presently no plans for utilization of these sections in that manner. Section 6 (9) might be regarded as potentially retrogressive with respect to environmental factors including, storm water and sediment runoff control in that "undue delay" has frequently been attributed to increased environmental controls.[53]

One recent study funded by the Ministry of Housing does have some positive application to control of runoff as it relates to reducing servicing costs for new housing.[54] Because storm drainage system costs are the largest and most variable element of residential development servicing cost presently, the Ministry has been seeking ways of reducing such costs. The report recommendations for reducing housing costs included returning roof flows to the ground service and increasing the length of overland flow during storms. The intention appears to be one of reducing storm sewer size and therefore associated servicing costs. To this extent the report favorably commented on methods for retardation and retention of storm water. It further noted that while these other, unnamed studies(perhaps pursuant to the Canada-Ontario Agreement of 1971)are primarily concerned with storm water quality and downstream effects, it was hoped that they would consider implications for subdivision design as well. It is not clear how this report is regarded by Housing and whether the Ministry has adopted its policy recommendations or not.

3. The Ontario Water Resources Act[55]

a. Purpose and Administration

The purpose of the Act is to preserve the purity and prevent the pollution of natural waters.[56] Administered by the Ministry of the Environment.

The key branches within the Ministry with responsibility in this regard regard include the Environmental Assessment Branch[57] whose role is one of defining broad criteria for protecting water quality vis-a-vis new development. This would include outlining that each new development shall not increase rate of runoff or contribute to degrading water quality at any stage. The Land Use co-ordination branch has broad overview commentary responsibility as well in evaluating new development in terms of its conformity to local official plans, zoning by-laws etc. The Water Resources Branch has responsibility for describing how a proponent of an activity is to control runoff. The Municipal and Provate Abatement Section grants approvals on the basis that Water Resources Branch and Assessment Branch criteria will be met by plans submitted to it by proponent.

b. Key Provisions

-"Sewage" is defined to include drainage and storm water.[58] "Sewage works" are defined to include any works for the collection, transmission, treatment and disposal of sewage.[59] The Act requires that where any municipality or person contemplates the establishment of certain classes of sewage, or the extension of or any change in existing sewage works, the plans, specifications and an engineer's report of the works to be undertaken must be submitted to the Minister.[60] No such works may be undertaken and no by-law for raising money to finance such works shall be passed prior to such approval.[61] The designated Ministry official, where he is of the opinion it is in the public interest to do so, may refuse approval or grant it on such terms as he considers necessary.[62] The maximum penalty which a court may impose for a contravention of s.42(1) is $2000.[63]

Where a municipaltiy contemplates establishing or extending its sewage works into another municipality, a public hearing shall be held, before approval under section 42 is given.[64] Hearings must take place before the Environmental Hearing Board on such terms and conditions as prescribed by the Minister.[65] Where the Ministry contemplates amending or varying an approval, it must hold a hearing prior to doing so.[66] A public hearing may be held where any person or municipality contemplate establishing or extending a sewage treatment work within the municipality[67] A hearing may also be required if the Ministry refuses to grant an approval, or imposes or alters terms and conditions of an approval. Prior to such a hearing the Ministry must serve notice of such determination and written reasons upon the person affected.[68] Besides the appellant and the Ministry, other persons specified by the Board may be parties to the proceedings.[69] Appeal from the Board's decision may be taken to a county court judge on a question of law, or to the minister on any other matter.[70]

The O.M.B. may order amendments to by-laws or official plans, to permit the use of land for the establishment or extension of a sewage work approved by the Ministry.[71] The O.M.B. may impose restrictions or other conditions regarding the use of the land not inconsistent with Ministry approval.[72]

Comment

(i) Because the definition of "sewage works" includes storm drainage and storm water, the Ministry is in the position of approving or requiring measures to control storm water for every such approval. The Ministry in 1974-1975 through its municipal and private abatement section, approved some 1,000 sewage works that included storm sewer works. Of these 1,000 less than 1% included requirements for some form of storm water detention.[73] Between 1965-74, approximately 840 industrial approvals were issued, though the Ministry did not have an estimate as to the number approved which included measures for controlling runoff from site construction. The Ministry presently doesn't have guidelines for the control of runoff though it expects industry to handle this pollution aspect in keeping with the overall philosophy stated in the Ministry booklet,[74] "Guidelines and Criteria for Water Quality Management in Ontario."

(ii) One example of present Ministry procedures for controlling runoff from, for example, construction activities related to sewer construction, is the York/Durham Provincial Sewage Works Project.[75] Because the Ministry is both builder and regulator of a large percentage of sewage works serving municipalities throughout the Province,[76] it can set standards for how construction runoff will be controlled, in the contracts it lets. In a heading entitled "Environmental Considerations" the Ministry's contractor is required to minimize any adverse effects on the environment in the vicinity of the project area during all phases of construction. The contractor is also informed that the Ministry may assign "full or part-time on-site inspectors whose sole responsibilities are to ensure compliance with environmental objectives." Matters that must be attended to, which have application to runoff control include minimization of vegetative clearing by "clearing as you go policy"; coverage of stockpiles of topsoil and other excavated material with plastic sheeting and use of drainage ditches to divert runoff to adjacent settling ponds; further consturction of settling ponds or silt traps as required; use of straw bales, filter berms and sand bags to retard and filter runoff prior to discharge to watercourses; avoidance of any encroachment on natural areas and streams to the extent possible; dust control but not including chemical means without approval; protection of trees by fencing etc.; general restorative practices.

(iii) The Ministry is presently formulating policy with respect to storm water runoff from new urban development generally. This may be supplemented by specific guidelines. Because the approach may require both quality and quantity control, there is concern in Ministry circles as to overlap of responsibility with other Ministries such as Natural Resources. That is to say, would certain Environment activities for controlling pollution from runoff, to the extent they retard runoff flows for example, be equally a responsibility of Natural Resources, as flood control measures? And if there is overlap, is the Ministry precluded from effective unilateral action?

While the question has probably not been settled in the minds of Ministry officials, the relative inertia on the part of Natural Resources on this matter to date would almost appear to give Environment the pre-eminent role by default.

Environments' objectives as suggested in a recent proposed policy draft[78] were: to protect property within new urban development; to complement downstream flood protection and erosion control measures; and to control the quality of storm runoff to protect water uses.

Such objectives, it was proposed, should be included in the permanent design and construction stages so that: during and post development conditions of rate of runoff don't exceed pre-development conditions; water use/water quality is not impaired by discharged pollutant loadings to receiving waters; disposal measures don't impair ground water quality or uses; runoff disposal doesn't cause "secondary" downstream sedimentation, erosion and impaired water quality; construction activities don't impair water quality through runoff, or alteration of river beds; Environment Snow Disposal and Deicing requirements are observed; Natural Resources regional storm flood plain policy is observed.

Background justification was to be provided by examples of: effects of urban storm water runoff on water quality; changes in runoff rate leading to erosion and flooding; adverse effects, both short and long term, from construction activities; money savings achieved when on-site detention/retention controls used, over usual drainage procedures.

Besides questions of jurisdictional/ministerial responsibility, actual guideline content seemed at an early stage in terms of: what does the term "new urban developments" encompass (ie. how all-embracing; what should be excluded); what size storm should be controlled; implications of the policy and guidelines; alternative means to control runoff or what "constitutes an acceptable exception"; should control be instituted on forested or agricultural areas? if not, why not?; how will construction guidelines be enforced once they are completed; should requirements be consistently the same in southern and northern Ontario; is urban storm runoff more manageable in a watershed scheme; what information will the regulated need in order to comply etc.

4. The Environmental Assessment Act[79]

a. Purpose and Administration

The purpose of the Act is "the betterment of the people of the whole or any part of Ontario by providing for the protection, conservation and wise management in Ontario of the environment"[80] It is to be administered

by the Ministry of Environment, and the divisions named in discussion of the OWRA would perform similar responsibilities under this Act with respect to runoff control.

b. Key Provisions

The scheme of the Act is that, upon coming into force, it will apply to all undertakings[81] of the public sector[82] unless they are exempted from compliance, temporarily or permanently, by regulation. The Act will not apply to private sector undertakings unless brought under its ambit by regulation.[83]

"Environment" is defined to include the human as well as the natural environment, and encompasses the social, economic and cultural conditions that influence the life of man or a community.[84]

Where the Act applies to a proponent's undertaking, he is required to submit an environmental assessment of the undertaking to the Minister and cannot proceed until the assessment has been accepted, and the undertaking approved.[85] Licenses, approvals, loans, etc. under other Acts may not be granted until the environmental assessment has been accepted and the undertaking approved by the Minister.[86]

The Minister may apply to the Divisional Court for an order enjoining any undertaking from proceeding contrary to the Act or invalidating any license etc. issued contrary to the Minister's approval. The public does not have a similar power.

The assessment must contain a description of the purpose of the undertaking; its rationale including alternate methods and alternatives to it; a description of the environment expected to be affected; the effects of the undertaking; and measures to mitigate the effects of the undertaking the alternate methods and the alternatives; an evaluation of the advantages and disadvantages to the environment of the undertaking, the alternate methods and the alternatives.[87]

When an environmental assessment is submitted to the Minister, he must cause a review of the assessment to be prepared and give notice of the receipt of the assessment, the completion of its review, the locations where the assessment & review may be inspected and any other matters he considers advisable to the proponent, to the clerk of each municipality where the undertaking will be carried out and as he considers suitable to the public.[88]

Where the Minister believes the assessment inadequate upon which to base a decision or where he accepts the assessment, he must give notice as above, including notice to those who made submissions to him on the undertaking, that he intends to accept the assessment or to amend it. Any so notified, may require a hearing on the matter, before the Environmental Assessment Board established under the Act, unless the Minister considers the hearing requirement to be frivolous, vexatious, unnecessary or a cause of undue delay.[89]

Further hearings may be required, again subject to the Minister's veto, where the assessment has been accepted or amended and accepted,

regarding final disposition of the undertaking.[90] The Minister, where no hearings have been held, with the approval of Cabinet, may approve, approve subject to terms and conditions, or not approve the undertaking. Written reasons by way of notice must be provided by the Minister to those involved in the process, and to others he considers advisable.[91]

Judicial review of Board actions, except on questions of jurisdiction is prohibited.[92] Hearings of the Board are open to the public except where the Board is of the opinion that a closed session is advisable.[93] The same principle is applicable with respect to access to information generally.[94] Where the Board makes a decision on an assessment pursuant to a hearing, the decision is binding on the Minister unless expressly varied by him with the approval of Cabinet, within 28 days of receipt of the Board's decision.[95] The Act, through regulations, could be made to apply to activities commenced but not completed before the coming into force of the regulation.[96]

Comment

The key to this Act's effectiveness in controlling runoff from developing urban areas, rests on when the private sector will be brought under the Act's ambit, or when, for example, the approval and development stimulation activities of the Ministry of Housing are required to comply with the Act's provisions. It is submitted that on the basis of evidence available to the contractor, this Act will not be permitted to apply to either of the above, for as long as the Ontario government believes political tolerance permits. For example, on July 11, 1975, Donald Irvine, then Minister of Housing, in a letter to then Environment Minister, William Newman, wrote "the Act's implementation process is unacceptable for housing and associated urban development because the legislation constitutes a form of land use control which is separate from and overrides the Planning Act." Basing his comments on personal experience in planning such housing projects as North Pickering as well as "representations from the development industry", Mr. Irvine further outlined his concerns which included: planning experience in North Pickering demonstrated that careful consideration of environmental factors can lead to the conclusion that large parcels of land in a land assembly should not be developed for urban uses; if this is true, what proportion of lands already designated in Official Plans for urban development might prove undevelopable;[97] if this factor were realized what would it do to housing costs?; developer uncertainty and risk would be stimulated by the Act's processes that would be reflected in increased costs; the environmental assessment process would add delay and associated costs to the process of developing housing. Mr. Irvine continued by arguing that "it must be clearly established that all urban development, particularly where housing is a component must be excluded in applying the legislation."

He added that the Environment Assessment Board established under the Act should as its first task: determine current and future cost implications for housing and urban development if the Assessment process applied to Housing, and develop specific guidelines identifying the factors to be considered in an environmental assessment; techniques to be used in measuring the impacts on the environment; and the standards to be used in evaluating environmental impact statements." Depending on the outcome of such investigations, and the then prevailing housing situation, Mr. Irivne suggested environmental controls could be implemented through the Planning Act.

Not to be outdone, on July 14, 1975, Mr. Newman, at the commencement of third reading of the Bill in the legislature, indicated that "the Environmental Assessment Act will have no restrictive effects upon the construction of housing in Ontario." Early application of the Act to the housing industry was ruled out because "as worded, the bill does not apply to the private sector until such time as the necessary regulations are passed. We would like to point out that our decision that the Bill will not have general application to the housing industry was endorsed by the standing committee."[97]

Information available to the contractor from other sources confirmed that proposed January 1976 regulations under the Act (since scrapped for other reasons) excluded any application of the Act to the housing industry or to the activities of the Ministry of Housing.

Assuming, perhaps optimistically, that the Act will ultimately apply to such activities, the process is ideally suited for requiring the implementation of appropriate runoff control measures, because it is intended to apply before any other approvals or any earth-disturbing activities take place. Properly done, impact studies with appropriate official and public scrutiny will be ideal for providing a high profile and documentation of the effects of runoff and measures necessary to control it.

Parenthetically, because of the apparent present intentions of the government with respect to delay of the assessment process to new housing and urban development, quaere, as to how much, if any, of the Environment proposed storm runoff control policy might be permitted to be implemented pursuant to the Water Resources Act to the extent that the process involved delay of housing starts because of delays in properly considering runoff control measures vis-a-vis servicing?

5. Ontario Planning and Development Act[99]

a. Purpose, Administration, Provisions

This Act permits the Treasurer of Ontario and Minister of Economics and Intergovernmental Affairs to designate and establish development

planning areas in the province. Once such an area has been established, the Minister must include in his order a direction that an investigation and survey be prepared of the environmental, physical, social and economic conditions in relation to the development of the planning area. This investigation must be followed within two years by a development plan.[100] The plan may contain policies covering the management of land and water resources; the control of all forms of pollution of the natural environment; development of recreational facilities.[101] The Minister is required to provide for notice and public hearings on any proposed plan. The Minister further must ensure that a copy of the plan together with the material used in its preparation is available for public inspection. Any person may have at least three months in which to make submissions on the plan, though hearings may commence any time after three weeks of the public notice has expired. Persons presenting the plan may be questioned on any aspect of the plan by any "interested" person. The report and recommendations of the hearing officer are available for public inspection.[102] Once the plan is adopted, no development, including any public work or by-law may be implemented which doesn't conform with the development plan.[103] Existing zoning and official plan provisions in municipalities affected will similarly be made to comply with the development plan's overall objectives.[104] The province may extend financial assistance to any municipality or other entity for implementation of aspects of the plan.[105] Any minister may be designated for the purposed of developing any feature of the development plan including the clearing, grading or preparation of the land for development including construction, repair or improvement of buildings works or other facilities. The selling, leasing or other disposal of land or interest in such land is similarly provided for.[106]

Comment

The Act is designed to cover aspects of planning that fall between overall provincial strategies and local official plans. A reading of its provisions suggests much that could be provided for at various stages vis-a-vis control of runoff from development activities designated for a development area. For example, at the survey/investigation stage preparatory to a development plan, the Minister could direct that attention be drawn to features of the water environment that would be harmed by subsequent construction or related activities to determine which watercourses might be too vulnerable to development. Similarly, the plan itself could provide policies for the control of runoff or mandate that no development be undertaken in a manner contrary to runoff control procedures outlined by the Ministry of Environment. The public participation sections of the Act provide opportunities for consideration and adoption of such concerns to the extent they might have been overlooked in the preparation of the plan. Nothing would appear to preclude the Ministry of Environment, for example, from appearing at such hearings to assure that its concerns and policies with respect to runoff control from new development are made known and

incorporated. The Ministry might perhaps prefer to wait until a particular development proposal from the plan came forward for approval pursuant to the Water Resources Act (re sewage works, for example.) However, this would only be a piecemeal reactive response. Early input would or might permit incorporation of the Ministry's concerns regarding runoff across the entire spectrum of possible development that might be subsequently generated by a development plan. This would be especially necessary to the extent that the Environmental Assessment Act will not apply to private development for the foreseeable future. From discussion with TEIGA officials, it is clear that information with respect to environmental controls, including runoff controls from activities under this Act are regarded as matters for the Ministry of Environment to provide at the approvals stage. What involvement the Ministry of Environment provides or is permitted with regard to the earlier development plan survey stage is not known at this writing.

6. Ontario Municipal Board Act[107]

a. Purpose, Administration, Key Provisions

The Board established by this Act is appointed by the Cabinet, and its members hold office at the "pleasure" of Cabinet. The Board not unlike the Supreme Court, has exclusive jurisdiction in all matters and cases in which jurisdiction is given or conferred upon it by this or any other special of general Act.[108] The Minister responsible for the Board is the Attorney General of Ontario. With respect to planning matters in Ontario, the present system is one of provincial supervision and control of municipal decision-making, particularly in areas of environmental planning and management as established under the Planning Act.[110] Thus the various planning and regulatory instruments or decisions already referred to under that Act either require approval by the Minister of Housing or the Board, or are open to appeal to one of them, before they become operative. As already noted, the system requires decisions to approve official plans and plans of subdivision to be made by the Minister, although he may refer his decision-making power to the Board.[111] The Board's approval is required where implementing instruments, such as zoning by-laws, have been enacted.[112] The Board acts as an appellate agency from decisions of committees of adjustment on zoning adjustment and subdivision consent applications.[113] It also has jurisdiction to hear appeals from negative decisions of municipal councils or refusals to act within one month on applications for amendemnts to zoning by-laws.[114] Finally, appeals to the Minister from refusals by a municipal council to initiate an amendment to an official plan may be referred by him to the Board for hearing and decision.[115]

Comment

The Board is clearly a pivotal institution with respect to the land use planning and control system in Ontario. Where land use matters interface with environmental quality considerations, however, the Board's record is somewhat mixed.[116] Moreover, the present Chairman of the Board has taken the position that the Board is only to hear planning evidence, not engineering or environmental evidence. The latter has recently been regarded by the Board as the property of some other provincial department.[117] While taken, in part, as a move to relieve an overburdened workload, the effect of such a move is to remove one of the few decision-making forums available to the public and environmental agencies for arguing the environmental implications of development proposals. A recent Divisional Court decision has held, however, that the Board must hear environmental concerns.[118]

7. Conservation Authorities Act[119]

a. Purpose and Administration

Responsibility lies with the Minister of Natural Resources, the Conservation Authorities Branch and the individual conservation authorities. The objects of an authority are to establish and undertake in the watershed area over which it has jurisdiction, a program designed to further the conservation, restoration, development and management of natural resources.[120]

b. Key Provisions

The Act grants a conservation authority power to: control the flow of surface waters in order to prevent or reduce floods or pollution;[121] buy, lease or expropriate lands;[122] erect works and sturctures;[123] alter the course of any watercourse;[124] cause research to be done;[125] study the watershed to determine a program for conservation of its natural resources.[126]

An authority may also make regulations, subject to cabinet approval for: prohibiting or regulating or requiring the permission of the authority for the construction of any building or structure in or on a pond or swamp or in any area susceptible to flooding during a regional storm, and defining regional storms for the purposes of such regulations;[127] prohibiting or regulating the straightening, changing, diverting, etc. of a watercourse.[128]

Comment

Discussion with Ministry and conservation authority officials reveals the following: the Ministry does not presently provide policy direction to local conversation authorities with respect to control of runoff from new urban development. The authorities themselves have considerable autonomy to determine their priority issues, but few have

developed anything resembling a systematic response to the problem. Little case documentation appears to have been generated either by or for MNR or the authorities on the problem, except on an anecdotal or working memory basis. The Ministry, in particular, has apparently taken the position of non action/direction on the issue despite the lack of any studies that would support such a posture. Moreover, no research and development funds are slated to be allocated to determine the wisdom of present Ministry policy despite acknowledgement that problems exist from new development (albeit not adequately documented).

The Ministry and conservation authority officials emphasize prevention of development in hazard lands, through activities and programs such as floodline/plain mapping. Hazard areas are defined to include areas susceptible to flooding, erosion etc.[129] It has been suggested that this activity, while directed ostensibly toward minimizing personal and property damage due to flooding, has some application and could be designed to have greater application to controlling pollution from urban runoff.[130] Several authorities have been insisting on runoff control as part of subdivision approval, but at least one investigated by the contractor, is woefully understaffed to undertake appropriate oversight responsibility for such requirements.[131] Moreover, an authority that has attempted to utilize its legislative power to control "the flow of surface waters in order to prevent or lessen floods or pollution" has come into conflict with local municipal by-laws. Such by-laws often provide that all surface waters must be transferred through storm sewer systems and that lots must drain to the road allowance. Thus, on-site storm water detention techniques for example become difficult to require without full municipal co-operation.[132]

With recent and projected cuts in authorities' budgets, and with continued policy non-direction from the Ministry on the issue of pollution from urban storm runoff, it is submitted that the authorities will not play the kind of vigourous, systematic monitoring role, that a reading of the Act, and the opinion of their peers,[133] might otherwise suggest.

8. Municipal Act[134]

a. Purpose and Administration

The British North America Act vests exclusive responsibilities for municipalities within the Province. The municipal corporation thus has most of its functions determined externally by the Province. The Municipal Act lays down its statutory jurisdiction and responsibilities in full. Responsibility rests with the Treasurer of Ontario and Minister of Economics and Intergovernmental Affairs.

b. Key Provisions

The Act permits municipalities to enact by-laws to construct works for the prevention of flood damage;[135] or to enter into agreements with the province to accomplish the same end;[136] to construct, improve, maintain, public wharves, docks, slips, etc;[137] to prohibit the injuring or fouling of the above including drains, sewers and rivers;[138] to prohibit the littering of public or private property;[139] to construct service drains from a sewer to the line of a highway;[140] to prohibit and abate public nuisances;[141] to prohibit and regulate the discharge of gaseous, liquid or solid matter into land drainage works and sewer connections;[142] to require the connection of buildings to sewer works;[143] to preserve and prohibit the injury or destruction of trees on street rights of way.[144]

Comment

While the language of the above provisions is broad, quaere whether a municipaltiy could enact a by-law requiring sediment and erosion control pursuant say to preservation of rivers or regulating the discharge of liquid or solid matter into land drainage works or sewer connections? It is submitted that such a specific requirement might well require an amendment to the Act. In such a case, the province might well prefer, if it wished to implement such a measure to require it as a matter of policy pursuant to subdivision agreements under the Planning Act.

B. Proposed

1. The Planning Act Review

A committee was established by the Minister of Housing in the summer of 1975 to review the following matters: (1) The Nature of Municipal planning; what is planning?; what should be included in municipal planning/; what should its goals and objectives be?; (2) The Process of municipal planning; who is involved and how?; what should be the roles of the province, the municipalities, other public bodies, special interests and the public? (3) The Tools of municipal planning; are the existing instruments - official plans, subdivision regulations, zoning by-laws and other development controls - adequate? Should they be revised or new ones introduced?

The review will include The Planning Act and all related planning legislation and activities. The Committee is expected to submit its report to the Minister in the fall of 1976. The report is expected to become a "Green Paper" for public review and discussion.

Among the issues that the Committee intends to pursue with respect to urban environmental matters are: which environmental concerns should be included/excluded vis-a-vis the municipal planning process? How can the system be organized to ensure that those concerns pertinent to municipal planning are taken into account? What are the unintended or unstated environmental consequences of municipal planning; how can they be taken into account in the process?; what are/should be the limits of municipal ability to interfere with private property rights? in requiring environmental conservation? Should there be compensation? What is the role of the conservation authority in municipal planning, though it is not explicitly mentioned in planning legislation? How should the planning system be structured so that such bodies have adequate access to municipal planning decisions, and so that their activities are suitably co-ordinated with municipal planning? Besides the traditional tools of planning should new planning instruments such as development permits or land use contracts be used? Should the requirements for subdivision approval be formalized in legislation of regulations? or should they be left to ministerial or local discretion? Should the contents and functions of official plans be defined in legislation? What should the role of the OMB be in resolving municipal planning issues where different provincial interests are involved (eg. housing and environment). Where provincial and municipal objectives conflict, how should they be resolved? What is the public's role in municipal planning? Is it appropriate at all stages? If the public is involved in the formulation of the official plan, should it be consulted every step of the way (eg. development applications?) Should public involvement consist mainly of responding to alternatives prepared by municipal or private interests?

Comment

While many of the above questions pose exceptionally important issues that have direct and indirect implications for the land use/water quality interface that is the subject of this study, the Committee is not at the stage where its views on these issues have been formulated. It has, however, commissioned a two stage report on municipal planning and the natural environment.[145] The first phase of that report is complete and has been reviewed. The authors of the study readily admit that the perspective of their report was much broader than the water quality/land use interface of this study. However, a few of their conclusions are worth noting:

- The Role of Conservation Authorities, if not their very existence, seems to provide municipalities with a justification for side-stepping natural environment concerns. As will be discussed below, several municipalities responded negatively to a conservation authority

request that they institute on-site detention techniques to control runoff from new development. In part, the response was that the local authority was the only one with expertise in the area. If it wants to institute such procedures, let it show the municipality how it can be done cheaply and safely. Another response, from a municipality whose boundaries fell into two authorities watersheds, was that the other authority didn't ask it to do the same thing. Even the municipality that decided to include such a requirement in its subdivision agreements, left oversight responsibility for the provision's review, with the authortiy, though the authority had had severe budget and staff cuts. The theory being: if you want it, you monitor and enforce it.

- The Ministry of Housing gives little attention the the natural environment, in its criteria with respect to municipal planning. This conclusion suggests that, as noted above, Housing will attempt to keep its activities free from increasing environmental controls as long as possible. Under such circumstances its acceptance of storm runoff controls may be quite difficult to obtain. (Unless they can be shown to systematically reduce housing costs and not add to delays.)

III. THE POLLUTION CONTROL ENFORCEMENT FUNCTION

1. Ontario Water Resources Act

a. Pollution Prohibition Sections

The Minister has the supervision of all surface and ground waters in Ontario,[146] and may examine them from time to time to determine, what, if any, pollution exists and its causes.[147] The Minister is permitted to apply to the Supreme Court for an injunction to prevent pollution of water where any person is discharging any material into or near a body of water that in the Minister's opinion may impair water quality.[148] It is an offence for a municipality or person to discharge or deposit, or cause or permit the discharge or deposit of, polluting material "into or in any place" that may impair water quality.[149] A first conviction may result in a maximum fine of $5000 and each subsequent conviction in a maximum of $10,000 fine or to imprisonment for a maximum of one year. (No minimum with respect to fine or imprisonment is established). Each day that subsection 1 is contravened constitutes a separate offence.[150] The Minister must be notified when polluting material is discharged etc.[151] Failure to so notify is an offence liable on summary conviction to a maximum fine of $5000.[152] (No minimum) Subsection 1 does not apply where the discharge to water is coming from "sewage works" constructed

and operated in accordance with approvals granted by the Minister.[153] The Minister by order may prohibit or regulate the discharge of any sewage into a watercourse.[154] Fines, as above are applicable.[155]

Comment

Since the definition of "sewage" and "sewage works" includes drainage and storm water, these sections are regarded by Ministry officials as broad enough to cover a storm runoff situation.[156] However, under section 32(5) which creates a statutory immunity to prosecution, if the Ministry Approvals Branch had authorized sewage works to operate without storm runoff controls,[157] then section 32 is inoperative and the Ministry would have to prosecute under the Environmental Protection Act. In practice, to the extent that the Ministry actually built or contracted to have the works built itself, it is unlikely the Ministry would prosecute itself.

Discussion with Ministry officials further indicates that these provisions have never been used in a storm runoff or construction site runoff pollution situation. Hence all of the above comment is speculation. The situation is ripe for a test case. It is not known at this writing whether violation notices have ever been filed with respect to this type of activity by any of the MOE regional offices, or the volume of complaints made, if any.

2. Environmental Protection Act[158]

a. Purpose and Administration

The purpose of the Act is to provide for the protection and conservation of the natural environment.[159] "Natural Environment" is defined to include the air, land and water of Ontario.[160] "Water" is defined to mean surface and/or ground water.[161] "Land" is defined to mean surface land not enclosed in a building.[162] "Contaminant" is defined to mean any solid, liquid...radiation resulting from the activities of man which may impair the quality of the natural environment for any use that can be made of it."[163] Administered by Ministry of Environment.

b. Prohibitions and Provisions

There are two main prohibitions in the Act. First, no person is permitted to deposit, add, emit, discharge into the natural environment or cause same, in an amount, concentration or level in excess of that prescribed by the regulations.[164] Second, notwithstanding any

other provision of the Act or regulations, no person shall do the above or cause the above to be done that causes or is likely to cause impairment of the quality of the natural environment for any use that can be made of it.[165] Control orders may be issued where a provincial officer[166] files a report containing findings that a person is causing or permitting emissions to the natural environment in violation of section 14 or the regulations.[167] Stop orders may be issued where the discharge of an emission into the natural environment constitutes in the Minister's or Director's opinion an immediate danger to human life, health or property.[168] The Ministry must be notified when a person deposits a contaminant into the natural environment out of the "normal course of events,"[169] and the Minister may order the repair of any such damage.[170]

Comment

The language in this statute is clearly broad enough to cover both point and non-point sources of water pollution though when enacted, it is doubtful that the legislature had nonpoint sources of water pollution in mind. Ministry officials have, with some exceptions, only prosecuted matters that might be readily identified as point source. It appears that the Act has yet to be actually tested against the construction industry for construction site runoff, included provisions for control or stop orders. Moreover, because this Act bends the Crown,[171] it is possible for a private citizen to bring prosecutions against the Ontario government and its agencies for water pollution offences, including the nonpoint source variety, which is not possible under the OWRA. Thus, for example, a private citizen could prosecute the Ministry of Environment for failure to take appropriate runoff control measures with respect to the construction of sewage treatment plants.

3. Conservation Authorities Act[172]

IV. OTHER STATUTORY CONTROLS

1. Ontario Building Code Act[173]

a. Purpose and Administration

The Act is designed to establish a building code governing standards for the construction and demolition of buildings including the manner

type and quality of material used; the design and use of buildings; adoption of codes and standards; requiring field review by an architect or professional engineer; requiring inspectorial approval of any method, matter or thing; prescribing conditions under which a building or part may be occupied; prescribing procedures of the Building Code Commission.[174] The Minister of Consumer and Commercial Relations is the responsible Minister. The Code is the responsibility of the building standards branch of the Ministry, but the council of each municipality is responsible for the enforcement of this Act in the municipality.[175]

b. Key Provisions[176]

The Building Code provides the basis for the regulation of excavations, placings of foundations and filling by the appropriate inspector.[177] Precautions are required that sensitive soils intended to support a foundation not be disturbed.[178] Design conditions require that a professional engineer prepare data indicating that the proposed excavation and foundation will not have structural "or other detrimental effects on the existing adjacent property including buildings and public or private buildings and services," or indicating details of the precautionary measures to be taken where the possibility of detrimental effects to adjacent property exists.[179] Backfilling activities require that support be given to soil adjacent to the excavation. Topsoil and vegatation must be removed in all unexcavated areas under a building.[180] Buildings must be located or the building site graded so that water will not accumulate at or near the building.[181] Where downspouts are provided and are not connected for a sewer, provisions must be made to prevent soil erosion.[182]

Comment

As discussed elsewhere the comprehensive powers of building inspectors and the comprehensive broad general controls regarding all phases of building construction including some noted above could permit requirements for averting or minimizing water pollution from such activities even while meeting other more specific criteria regarding structural stability and safety.[183] From discussions with Ministry, Building Standards officials, it is clear that the Code is primarily directed toward assuring structural stability. While, for example, rooftop detention is permissable now, or at least not contrary to the Code's provisions, a municipality would have to ensure that requirements for rooftop detention would take into account structural stability[184] and roofing factors.[185]

V. AGREEMENTS AND NON STATUTORY PROGRAMS

1. Canada-Ontario Water Quality Agreement 1971

a. Urban Drainage Subcommittee

See discussion under Federal Controls.

2. Storm Runoff Control From New Urban Developments Policy

See discussion under Ontario Water Resources Act (II.A.3)

3. Lake Capacity Study for Cottage Development

To be discussed under Recreational Areas report.

NOTES

1. R.S.O. 1970,c.349 as amended.

2. O.Reg. 57/76

3. Supra,note 1,s. 2(1).

4. Ibid, s.12(1)(d) and s.13. Section 12(1)(d) permits planning boards to submit plans for municipal council approval and section 13 permits councils to approve such plans.

5. s.14

6. s.19(1). A municipality may also acquire lands in accordance with official plan provisions, s.21.

7. See, for example, R. Lang and A. Armour, "Municipal Planning and the Natural Environment," A Report to the Planning Act Review Committee of Ontario, November 1975, p.58. This was a survey of a broad cross section of official plans for environmental and other criteria.

8. op.cit.s.15(1) and s.17(1).

9. ibid s.15(1).

10. s.29(7) and s.33(6).

11. s.33(14).

12. s.33(2)(e)

13. s.33(2)(g)

14. s.33(2)(i)

15. s.33(2)(j)

16. s.33(2)(k)

17. s.33(5).

18. s.33(4)(a).

19. s.33(4)(b)

20. s.33(4)(g)

21. s.33(4)(h)

22. s.33(6). Examples of provisions of subdivision agreements that provide for some elements of protecting watercourses from construction site and stormwater runoff are described in the Part on Municipal Controls, infra.

23. Committees of Adjustment are discussed, infra.

24. s.29(2) and s.42(3).

25. s.33(7).

26. ss.35, 35a, 35b and 38.

27. s.35(1).

28. ibid.

29. ss.34(1) and 35(9). Land-owners have a right of appeal. s.35(22).

30. ss35(12)(14).

31. s.32(1)(3)

32. s.43.

33. s.41

34. s.42(1)

35. s.42(3)

36. s.42(5).

37. s.42(4)

38. s.42(7)

39. s. 42(9)

40. s. 42(11).

41. s.42(13)

42. Like any time saving procedure, variance or severance may produce a problem in environmental protection areas. Apparently some municipalities will approve severences of property when there is not a suitable building location. (eg. flood plain lands). These problems can be further compounded by real estate brokers, selling property which they know or should be aware cannot be built upon. Letter from B. Noels, Operations Manager, Credit Valley Conservation Authority to R. Lang, professor environmental studies, York University, May 7, 1976. Such activity may have a further adverse effect on water quality vis-a-vis runoff. See discussion of the value of environmental protection areas as partial runoff control buffers, under Municipal Controls, infra.

43. s.33(5)(a).

44. s.33(8)

45. Pollution From Land Use Activities Reference Group (U.S. report) Vol. 1, November 1974.

46. See discussion of the Housing-Environment interface under discussion of the Ontario Environmental Assessment Act, infra.

47. R.S.O. 1970, c.213 as amended.

48. s.6. This section provides for federal/provincial agreements to effectuate those three ends pursuant to the National Housing Act.

49. s.2.

50. s.6(9)

51. s.16(a)(b)

52. Supra, note 49.

53. See Ontario Ministry of Housing, Ontario Housing Action Program(1974), in which slowed housing starts have been attributed to, among other things, increased environmental controls.

54. Ontario Ministry of Housing, Local Planning Policy Branch "Urban Development Standards: A Demonstration of the potential for reducing costs." (March 1976)

55. R.S.O. 1970,c.332 as amended. Discussion of this Act is being divided into two parts to distinguish the Act's "planning" aspect and its "pollution control enforcement" aspect.

56. See R.v.Sheridan,[1973]2O.R.192; R.v.Industrial Tankers Ltd.[1968] 2O.R.142

57. This branch will also have prime responsibility under the Environmental Assessment Act discussed, infra.

58. s.1(p)

59. s.1(q)

60. s.42(1).

61. ibid.

62. s.42(4)

63. s.42(2)

64. s.43(1)

65 s.9a(10). The Hearing Board has recently been proclaimed as the Environmental Assessment Board.

66. s.43(4)

67. s.44(1)

68. s.79(2)

69. s.79(4)

70. s.79(3)

71. s.43(11) and s.45

72. s.43(12)

73. Communication from D. Cane, Municipal and Private Abatement Section, Ontario Ministry of Environment, May 1976.

74. Communication from J.B. Patterson, Industrial Approvals Section, Ontario Ministry of Environment, May 1976. The Guidelines have no legislative effect but are goals for industry to meet in limiting conventional pollution discharges from such activities as textiles, iron and steel, petroleum, etc. Only when criteria are attached to a certificate of approval do they have legal effect.

75. Ministry of Environment, Standard Documents for the Construction of Sewers, August 1975 (First Edition).

76. This dual role, it has been suggested, places the Ministry in a conflict situation. The public must trust the Ministry to apply high standards on approving sewage works which it frequently has responsibility for the building of, as well. See A.W. Bryant, "An Analysis of the Ontario Water Resources Act," in Environmental Management and Public Participation, Canadian Environmental Law Research Foundation (Toronto, 1975).

77. See Memorandum from S.E. Salbach, Water Resources Branch, to J. N. Mulvaney, Ministry of Environment Legal Services Branch, Sept. 29, 1975.

78. "Control of Runoff from New Urban Developments", Draft of a Policy and Guideline Statement, November, 1975.

79. S.O.1975,c.69. The Act received Royal Assent July 18, 1975 but has not yet come into force.

80. s.2.

81. Defined as enterprises, activities, proposals, plans or programs. s.1(o)

82. That is the provincial government and municipalities.

83. ss3 and 41

84. s.1(c)

85. s.5

86. s.6

87. s.5(3)

88. s.7.

89. ss7 and 12

90. s.13

91. s.14

92. s.18(19)

93. s.19

94. s.31

95. ss20 and 24

96. s.45(2)(a). For a brief discussion of implications of this "retroactive" provision see "Ontario Passes Canada's First Environmental Assessment Act," (1975) 5 CELN29,35.

97. Apparently, the OHAP program, over the objection of a Conservation Authority in the Ottawa area, recently encouraged a housing development in a designated flood plain. Communication from R. Lang, professor of environmental studies, York University, May 1976.

98. Third Reading Opening remarks of W. Newman, Environment Minister, on Bill 14. The Environmental Assessment Act, Legislature of Ontario Debates, Fifth Session, 29th Legislature, July 14, 1975, at page 3964.

99. S.O.1973,c.51 as amended. Because the Parkway Belt(West) Planning and Development Act S.O.1973,c.53 and The Niagara Escarpment Planning and Development Act S.O.1973,c.52 are similar in intent and content to the Planning and Development Act,(they apply to two specific areas deemed to be in urgent need of protection) they will not be discussed further at this time. Discussion, for example, with respect to the Niagara Escarpment Act will be taken up in later sections in regard to its pits and quarries control aspects, and to the Parkway Belt Act's provisions for open space and land reserve for later development.
The North Pickering Development Corporation Act S.O.1974,c.124 is a similarly construction Act designed to provide a plan for development for the 25,000 acre North Pickering site northeast of Metro Toronto. The plan may include policies for economic, social, environmental, agricultural and physical development in the area. It is understood that the North Pickering Project intends to incorporate storm runoff control and treatment measures into the design of the new town in order to minimize adverse effects to watercourses. An erosion management plan is also expected to be included. Information obtained from "Documentation of Problems in Ontario Associated with urban Storm Runoff", Water Resources Branch, Ministry of Environment, November 1975.

100. s.2
101. s.5

102. s.6

103. s.9

104. s.10

105. s.17

106. s.15

107. R.S.O. 1970,c.323 as amended.

108. s.35

109. s.34

110. See discussion of the Planning Act, supra.

111. The Planning Act ss.15(1) and 17(1) and 44.

112. s.35(9)

113. s.42(13)

114. s.35(22)

115. s.17(3)

116. See for example, Re City of Sault Ste. marie Restricted Area By-Law (1973) 2 CELN92, in which the OMB approved the enactment of municipal rezoning by-laws which permitted the construction of a large new harbour facility despite "significant evidence" (the Board's words) that construction of certain facilities would cause water quality and water and land use problems. The Board preferred not to base its decision on potential negative environmental impact, because it postulated that there were environmental agencies better able to determine these factors before granting approvals. Compare with Re Ministry of Natural Resources and the United Counties of Leeds and Grenville Land Division Committee(1975) 4 CELN70, in which the OMB reversed a sub-division consent, which, if approved would have contributed to increased lake nutrient pollution because of cottage over-development. (To be discussed further under Recreational Areas report). Here the Board concluded that land use planning on an already polluted lake may require a greater standard of control to prevent further lake deterioration, even where local authorities were otherwise satisfied with the application.

117. See, "Ontario Municipal Board Undergoes a Streamlining," The Globe and Mail, August 12, 1974.

118. Re Township of WestMinister and City of London(1975) 5 Ontario Reports (2d) 401. The decision also noted the difficulty of distinguishing between environmental and planning factors, in many instances.

119. R. S. O. 1970, c.78 as amended

120. s.19

121. s.20(k)

122. s.20(c)

123. s.20(j)

124. s.20(l)

125. s.20(q)

126. s.20(a)

127. s.27(e). See, For example, O.Reg. 617/73 re Credit Valley Conservation Authority. Pursuant to s.27(e) one conservation authority recently obtained a temporary injunction to prevent the construction of a shopping center in land subject to flooding during a regional storm. See Central Lake Ontario Conservation Authority and the Attorney General of Ontario v. Dominion Stores Ltd. 3 CELN 213.

128. s.27(a)

129. Ministry of Natural Resources, "Environmental Protection Areas," (December, 1973), and "Hazard Lands" (June 1975). See also Ministry of Natural Resources, Submission to the Planning Act Review Committee, (February 1976). The Ministry further regards development as undesirable where it is likely to have adverse impacts on fish or fish habitat or conservation of the natural environment," though it admits that "to meet a higher order of government objectives, such as housing, certain developments that conflict with achievement of our objectives will inevitably be approved. "See Ministry of Natural Resources, Land Use Plan Review Handbook(1974) and note 97,supra.

130. Interview with B. Noels, Operations Manager, Credit Valley Conservation Authority, April 26, 1976, and interview with J. Murray, Conservation Authorities Branch, Ministry of Natural Resources, May 7, 1976. For example, authorities in outlining environmentally sensitive areas vis-a-vis flooding, often evaluate them as well, on the basis of likely environmental quality problems, if subsequent development is permitted. However, in designating such areas through official plan and zoning techniques, governmental agencies are frequently asked by developers to purchase lands which are restricted from development. The value of such property is often calculated on the basis of the proposed development. The result is prohibitive costs to the community. See Metropolitan Toronto and Region Conservation Authority, Brief to the Planning Act Review Committee, April 5, 1976.

131. See Discussion regarding Credit Valley Conservation Authority under Municipal Controls report, infra.

132. Communication from B. Noels, Operations Manager, Credit Valley Conservation Authority, May 7, 1976. See also Municipal Controls report, infra. But of s.19 of OWRA.

133. Conservation Council of Ontario, "A Conference on Erosion - Causes, Effects, Controls" April 1972. pp60,61.

134. R.S.O. 1970,c.284 as amended

135. s.352(17)

136. s.352(18)

137. s.352(47)

138. s.352(49)

139. s.354(1) 70

140. s354(1) 73

141. s.354(1) 120

142. s.354(1) 129

143. s362(a)(1)

144. s.457

145. Supra, note 7

146. OWRA, s.31(1)

147. s.31(2)

148. s.31(3)

149. s.32(1)

150. s.32(2)

151. s.32(3)

152. s.32(4)

153. s.32(5). This immunity to be successfully argued must show that the accused operated his sewage works in conformity with the approval. R.v. Barrie(1970) 13 Cr.L.Q.371(ONT.); R.v. Sheridan [1973] 20.R. 192; R.v. North Canadian Enterprises Ltd. (1974) 20C.C.C. (2d) 242(ONT.).

154. s.33(1)

155. s.33(2)(3)

156. Interview with J.N. Mulvaney, Director, Legal Services, Ministry of Environment, April 28, 1976.

157. Pursuant to s.42.

158. S.O. 1971,c.86 as amended

159. s.2.

160. s.1(i)

161. s.1(p)

162. s1(e)

163. s.1(c)(i)

164. s.5. There are no regulations respecting water pollution in Ontario. This section will therefore only be of effect if there are specific regulations controlling quantity of runoff.

165. s.14(1)

166. s.82, Creates provincial officers.

167. s.6. Provincial officers must maintain secrecy on all matters except information respecting deposit etc. of a contaminant into the natural environment, except in matters in connection with administration of the Act, to his counsel or with the consent of the person to whom the information relates. s.87

168. s.7

169. s.15

170. s.17. See R.v. Power Tank Lines (1975) 23 C.C.C.(2d) 464 and (1976) 5 CELN 15 where a highway accident involving the loss of oil to storm sewer and watercourse resulted in a conviction under this section. (To be discussed in greater detail under Transportation Corridors).

171. s.20

172. See discussion regarding pollution control provisions, supra beginning note 127

173. S.O.1974,c.74.It is understood that the Ontario Building Code is based in vast part on the National Building Code, so discussion of the former will include the latter.

174. s. 18

175. s.3. The Building Standards Branch is now also responsible for the Plumbing Code of Ontario which was previously a responsibility of the Water Resources Branch of the Ministry of Environment. The Building Code covers those matters not in the Plumbing Code, but it is understood from Ministry officials that plans are being made to modify and incorporate the Plumbing Code into the Building Code.

176. A typical municipal building by-law is described under Municipal Controls, infra. The discussion here will merely be supplementary.

177. O.Reg.925/75 (The Building Code) section 4.2.8.

178. s.4.2.8.3.

179. s.4.2.1.14

180. s.9.12

181. s.9.14.61

182. s.9.14.64

183. Supra, note 179. This provision might well permit silt control.

184. Part IV.

185. Part IX.

PART THREE

MUNICIPAL CONTROLS

URBAN AREAS

TABLE OF CONTENTS

IV. BY-LAWS

A. Existing

1. Nuisance by-law

2. Refuse or Fouling of Highways by-law

3. Tree Protection by-law

4. Building by-law

5. Other by-laws

B. Proposed

1. Tree Protection by-law

a. Status
b. Provisions

2. Topsoil Protection by-law

a. Status
b. Provisions

3. Development Control by-law

a. Status
b. Objectives
c. Administration
d. Key Provisions and Performance Criteria

V. NON-STATUTORY CONTROLS

A. Existing

1. Environmental Advisory Board

I. OVERVIEW

Municipal control of construction runoff from urban development and stormwater runoff generally, is in relative infancy in local jurisdictions studied by the contractor. In one jurisdiction, studies are in their final stages which, if their policy provisions are implemented, would have application to runoff problems from an official plan, subdivision control and building code perspective. Existing laws studied, were generally silent on the problem, on their face and as enforced by local authorities, though the generality of the statutory language allows an interpretation that enforcement, and permit-control might be possible. Local officials expressed a preference for implementing runoff control measures by way of subdivision approval if at all. While from an administrative efficiency perspective this approach may be understandable, it is also a cause for some concern. The subdivision approval process is essentially an insulated dialogue between the developer and the local municipal authority. The unseen, unheard third party with an interest in such matters - the public - is seldom aware of, or made privy to, the crucial details of such negotiations. The crucial details usually determine, explicitly and implicitly, what will be required as conditions to approval, who will monitor and inspect for compliance, with what frequency, and with what resources in short whether runoff pollution will be controlled or not. Even the best intentioned municipality, or local conservation authority, will often be insufficiently staffed to properly oversee the process this was certainly the case with municipalities surveyed by the contractor. Where requirements for silt and erosion control plans were included in subdivision agreements, oversight responsibility was left to the local authority least adequately staffed to properly administer such measures.

It is submitted that municipalities should be fiscally and jurisdictionally encouraged by senior government to adopt and utilize all control measures necessary, including subdivision controls and requisite monitoring, to prevent runoff pollution. It is further submitted that senior government encourage municipalities to expand the potential number of participants in the process, by conditioning loans or grants, on the adoption of appropriate by-laws which will provide the basis for public involvement and enforcement including injunctive enforcement where appropriate.

II. OFFICIAL PLAN, ZONING AND ENVIRONMENTAL PROTECTION AREA CONTROLS

A. Existing

As noted elsewhere, regulation of land use can be an important, if indirect, control of nonpoint source water pollution because of the limitations that such control can place on where certain earth-disturbing activities may take place. When a municipality promulgates an official plan for the planning area under its jurisdiction, no public work can be undertaken and no by-law can be passed which doesn't conform with that official plan.[1] In theory, an official plan may provide criteria against which the environmental impact of a proposed work may be measured. In practice, official plans reviewed by the contractor generally

do not provide such criteria. In Mississauga, for example, the official plan[1a] is a map showing current land uses and here and there a word or two about some aspects of existing sites. The plan is silent on any environmental matters, or areas, worthy of special protection such as wetlands or watercourses. Environmental planners in the Mississauga Department of Planning regard the present plan as insufficient for defending environmental amenities, including watercourses.

Zoning by-laws reviewed in Oakville and Mississauga are similarly typical.[1b] Such by-laws are mechanisms for dividing a "planned area' into use or land use zones so that all activities can be carried on without interference from or interference with other activities. Generally speaking the by-laws reviewed in this category don't require a land owner to engage in a particular activity, they rather state that if some new use is contemplated for the land, it must fall within the permissable uses set out in the zoning by-law.[1c]

File information was unavailable to determine how Mississauga zoning by-laws had been utilized with respect to areas of concern to this study. In Oakville, a file search turned up several prosecutions and convictions, for an individual keeping barrels on his premises, in an area zoned to discourage open or outside storage. The barrels contained oil, and were subject to street leakage, and therefore probably could have been the subject of a nuisance by-law prosecution as well.[1d] To this limited extent, existing by-laws reviewed provide a broad, if wavering protection from water pollution from land use activities.

B. Proposed

1. City of Mississauga Environmental Planning Policies and Protection Areas

a. Status

The publication of a policy report which has the support of the Planning Department but which has yet to be referred to Council for approval. The report was prepared pursuant to a resolution of Council in July/74.[1e] If approved, policies to be incorporated into official Plan which is presently under review.

b. Purpose

To provide a basis for Official Plan environmental planning; to provide guidelines for the preparation of secondary plans, subdivision plans and site plans; to establish environmental planning criteria; to outline requirements for environmental assessment and impact studies where areas of "high environmental significance and sensitivity" (to be designated in the official Plan as "environmental protection areas") are threatened in whole or in part by new development.

c. Administration

The designation of "Environmental Protection Areas" is to be incorporated into the city's revised Official Plan, and all development that might affect such areas will be required to conform to the Plan's goals through subdivision agreement's, etc. The process of negotiating subdivision agreements falls principally on the city's engineering department. Of course, the normal comment and review process of any local government will include other obvious agencies, including the Planning Department, Parks and Recreation, etc., and other levels of government eg (local conservation authority) and the province.

d. Key Goals, Objectives and Policy Provisions [2]

"To minimize pollution of ... water resources including surface water features." To meet this goal the Planning Department report recommends incorporation in all urban development projects of runoff control devices, such as temporary sedimentation ponds, to eliminate water pollution by sedimentation.

"To retain and maintain Environmental Protection Areas in an undisturbed, natural condition". The report recommends that the City prohibit all forms of urban development from being physically located within Environmental Protection Areas, and that the Areas have distinct boundaries to prevent intrusion by all forms of construction activity.

"To preserve and protect the natural condition of steep valley slopes". The Report recommends that slope stability analyses be conducted; that buffer strips be established; that no vegetation be removed or disturbed in or near such areas; that where the limit of inherent slope instability is determined, that all lands below such a limit be deeded gratuitously to the City and that such lands are in

addition to open space requirements pursuant to the Planning Act. [3]

"To preserve and protect the ecological condition and natural functions of wetlands and marshes within Environmental Protection Areas." The Report recommends that the City prohibit any activity within or near a marsh or wetland which will... cause pollution by sediment, oil or water soluble chemicals... "or" reduce water retention and detention capabilities"; that environmental assessments be undertaken; that minimum building setbacks from the edge of the wetland be established.

COMMENTS

From discussion with drafters of the report and review of a number of maps associated with their study, the following additional information is of significance. The planners responsible for the report, built one of their conceptions of what "environmental sensitive areas" might be, around the notion of protection of major and minor watercourses. One major watercourse which flows through Mississauga, is the Credit River. A review of one of the maps, which if approved, would become part of the new Mississauga Official Plan, indicates that the environmental experts in the Planning Department are of the opinion that the area on both banks of the river would fall into the "Environmental Prot-ction Area" category. Thus it would be subject to the above enumerated protection policies. If this is the case, then a natural barrier or buffer of vegetation and undisturbed topsoil could provide that watercourse with considerable protection from runoff from future earth disturbing activities in the vicinity.

2. Town of Oakville Environmental Plan

a. Status

In November 1975 the Town of Oakville Council requested that the Planning Department explore the possible use of an "environmental plan" to determine such things as growth rate, density, preservation of agricultural land, housing type, land use and zoning in future areas of development. The Work Program is presently in its first phase which includes; a data base inventory; and field survey and analysis. Phase II is scheduled to begin in June/76 with a review of policy options on density, growth, and development, etc. Phase III, scheduled for the fall/76, will see the actual formulation of the plan which will provide input into the /77 Official Plan Review

for Oakville as well as provide integration into existing provincial statutes such as the Planning Act and the Environmental Assessment Act.[4]

b. Purpose and Description

The Environmental Plan as perceived in Oakville will define choices and options of the municipality after /86 based on a resource inventory of natural elements of the existing environment. It will also explore alternative land uses and provide recommendations for land use based on the impact of urbanization on the natural environment. It is intended to provide information and background data for the official plan review; "however, the study will differ from the official plan review in that environmental data will be used to provide criteria entirely for development based on natural land capability".

c. Administration

The plan is envisaged as providing input into the revised Town Official Plan and thus future development would have to conform to those aspects of the Environmental plan that are incorporated into the official plan. It will likely also be enforced as part of future subdivision agreements and "impact zoning by-laws". To this extent it will become a major responsibility of the Public Works Department and the By-Law Enforcement Division respectively.

d. Goals

To determine the future land use and settlement patterns of the Town of Oakville based on the present social and natural environment.

To determine future growth, density, zoning and land use based on the carrying capacity of the land to sustain human and non-human life.

To develop open space, land use, density, growth and agricultural land policies.

Development of the Town such as to permit the natural environment to absorb some of the infrastructure (eg. storm sewers).

To provide growth criteria for the Town of Oakville for the period 1975-2000. (Oakville is expected to have a 67% increase in population in the ten year period 76-86).

To develop an "environmental determinism" approach to land use planning. (Defined as the highest and best use of land based on natural constraints. Knowledge base to include, climate, geology, physiography, hydrology, vegetation, wildlife, soils etc.)

To develop linkages with the Environmental Assessment Act.

COMMENTS

The program is still at too early a stage of development to make firm analogies to Mississauga's more advanced study. Discussion with a planner involved in the Oakville effort, did reveal that the environmental plan could outline "sensitive" or "critical" areas such as watercourses, etc. which would then be insulated from development pressures. It is expected that once the data base on the existing environment is complete (after phase one) that an environmental assessment review process will be developed, to "provide a description of development types and their impacts". This "cause-and-effect" data, it is hoped will enable the Town to develop "performance guidelines for the future use and protection of natural environment units". One of the expected difficulties in the environmental planning process, will be the linkup of such data with policy initiatives and future options.

III. SUBDIVISION CONTROLS

A. Existing

1. Purpose

As noted under the discussion of provincial mechanisms, subdivision control is instituted wherever an individual wishes to sub-divide a parcel of land and develop it. Under the terms of the Planning Act he may not convey any part of his parcel unless the land is described in accordance with a plan of subdivision which has been registered under The Registry Act or under The Land Titles Act.[4a] The plan cannot be registered until a draft plan of subdivision has been approved by the Minister.[4b] The Minister may impose whatever conditions to the approval of the plan of subdivision he may consider advisable.[4c] In practice, the bulk of this front line responsibility falls on the particular municipality for drafting the agreements and outlining any special requirements particular to the municipality subject to Ministerial approval.

2. Administration

In Mississauga, for example, responsibility for such matters falls on the subdivision control engineering department. It's responsibilities include:

- processing of designs and agreements related to all subdivisions, land use changes and divisions of land;
- reviewing of final plans for registration relative to survey and engineering matters;
- arranging for financial securities as required;
- establishing the City requirements for each plan of subdivision, etc;
- performing necessary surveys and inspections in the field to ensure that the work being carried out by the developer is in accordance with City standards and specifications;
- finalizing all subdivision projects including such items as lot drainage, release of securities, etc. 4d

COMMENT

This activity and operation is regarded as self-sustaining in Mississauga because costs incurred are offset by the fees received by developers. As will be elaborated upon in subsequent sections the field control facet of the subdivision department is regarded as understaffed. Since field control inspection may well be a key to controlling construction runoff, fees might be increased to offset the hiring of additional inspection staff. However the raising of fees would likely raise the cost of housing units. If loans could be made available from the CMHC, for new stormwater runoff control collection techniques and adequate inspection staff, then this housing cost rise might not occur. 4e

3. Key Provisions of Subdivision Agreements

a. Special Provisions regarding stormwater and silt and erosion control measures.

Both the City of Mississauga and the Town of Oakville have within the last six months been including a special provision in their engineering agreements with developers similar to the following:

- "prior to initiating any grading or construction on the site: the developer's engineer must submit a detailed engineering and drainage report acceptable to the local conservation authority which will describe the means whereby stormwater will be

conducted from the site, and show siltation and erosion control measures to be used to minimize drainage during all phases of construction" to a particular creek, stream, etc.

COMMENT

Because this provision has been inserted into, for example, Mississauga subdivision agreements at the insistence of the Credit Valley Conservation Authority, (CVCA) responsibility for oversight of the matters contained in the provision has devolved on the Authority. The Authority is on record since at least Sept. /75 as being concerned with storm-water runoff increase from urban development and the associated erosion and environmental damage to creeks and streams. [5] Municipal action on this matter within the Credit watershed has been mixed. [6]

The standard form CVCA provision as set out above, if properly enforced and monitored can be of considerable value in controlling construction runoff. But sufficient inspection staff is necessary. Between 74 and 75 CVCA subdivision on-site inspections for reports and recommendations increased 25% per week and are expected to continue to increase. [7] At the same time the number of CVCA land use co-ordinators who spend part of their time on this activity has decreased from two to one for fiscal year 76. Because of budget cuts at the CVCA, and the considerable development[8] and construction activity[9] in the watershed, it is submitted that part of one land use inspector's time is hardly commensurate with the vigorous review and oversight envisioned for such a subdivision requirement. If the inclusion of such a provision in subdivision agreements is not to degenerate into a pro forma ritual, staff and resources will have to increase. Perhaps staff could be utilized from the City's building or engineering/subdivision departments. [10]

b. Tree Conservation Plan

The following requirement also appears in recent Mississauga and Oakville subdivision agreements:

"prior to initiating any grading or construction on the site: preparation of tree conservation plans acceptable to" the local conservation authority or the Parks Department must be made.

This clause originally expected to be administered by the CVCA, in practice has devolved in Mississauga as a Parks Department responsibility. Approximately 95% of the responsibility is now Parks Department. The department has promulgated Guidelines and Specifications for protection of trees, which are usually attached to the tree conservation plan itself

COMMENT

While the original impetus for this provision's incorporation into subdivision agreements, was preservation of trees in and of themselves, an obvious, if varying side effect, is control of some elements of soil erosion and sediment loss. However, discussions with Mississauga officials reveal that three to four of the eight guidelines are either not adhered to or not properly inspected or enforced, because of staff limitations, of the remaining guidelines and specifications "some adherence "was observed or doubt was expressed as to whether these specifications were being followed. Enforcement of this provision is usually by way of a letter of credit or cash. However, the maximum deposit is $1,500 per lot or $5,000 per builder. Discussion with officials indicated that the sum of $5,000 was inadequate considering the monies that might be necessary to restore damaged trees. It was also felt that the letter of credit should be with both the developer and the builder since there is often a hiatus period between development and building construction during which time trees might be lost from the preceeding development activities.

c. Mud Track Bond and Wash Rack Requirements

These requirements have been noted in previous DOE studies.[12] In Mississauga the developer pursuant to the engineering agreement is required to "maintain all roads within the plan in a mud and dust free condition" throughout the term of the agreement. After the placement of base course asphalt the Developer is responsible for maintenance" regardless of the persons responsible for the mud and dust". If the developer fails to comply with a verbal notification to him or his representatives by the City within 24 hours of such notice, the City can undertake such works as are necessary to clean the roads. The monies for these works may be

drawn from cash securities required under the other sections of the agreement. The developer is also responsible for clean-up of existing external roads upon which mud and dust are created "by any operations within the plan" and the above conditions for internal roads are similarly applicable.[12a]

COMMENT:

In Mississauga the bond requirement is regarded as reasonably satisfactory for controlling soil losses to streets. For the period 1971 to date $489,000. was on account from such bonds, while only $5900. had to be deducted for the period 1975 to date, for violations of that term of the agreement. 13 In Oakville, the use of the wash rack requirement which had appeared in several recent agreements, has been discontinued because it was found to be administratively unwieldy Other methods are being experimented with in Oakville such as requiring trucks to travel on alternate routes of crushed stone where mud will be caught before reaching municipal streets.

It is common in Mississauga to refer all mud tracking complaints to the subdivision field control inspector, as it is regarded as more likely that a developer will adhere to engineering agreement requirements, because monies are at stake, than to proceed by way of by-law prosecution, where an insignificant fine is likely.

This is so even though Mississauga subdivision control inspector staff is regarded as under-manned at present, and capable of only spot checks.[14] Moreover, no general procedures have been made regarding methods made for removal and preservation of natural topsoils or other vegetative coverings.

d. Certificates of Compliance by Developer's Engineer

Previous DOE studies [15] have noted the practice of requiring the developer's engineer to submit formal certificates of compliance as a means of supplementing direct inspections. Such individuals can then be held professionally responsible for any lack of compliance with requirements. Such certificates are required in Oakville and Mississauga "with respect to each lot or building block for which a building permit application is made, certifying that the proposed construction is in conformity with the overall grading plan," and that "the property has been developed in conformity with the overall grading plan." More information to follow.

B. Proposed

1. Stormwater Detention Techniques (Mississauga)

a. Status

A report on proposed stormwater detention techniques for new and existing plans of subdivision has been prepared by the Engineering Planning Department and circulated to the various city departments for comment. Neither Council nor the other departments have approved the report. [16]

b. Purpose

The purpose of this effort is to develop techniques to implement "as soon as possible" controlled runoff on plans of subdivision which are presently being processed and for all future plans which will be submitted in those drainage areas which are now of major concern in the city of Mississauga. [17]

c. Administration and Implementation

If approval by resolution of council stormwater detention techniques would be required as conditions of draft plan subdivision approval, and become the prime responsibility of the Subdivisions branch. It would require that detention levies under the agreement would be assessed per area (approximately $2,000. per acre) against the developer, as is presently done with respect to levies for road improvements and improvement of watercourses. Revisions in the building code by-law regarding size of pipe; design of roofs; disconnecting of roof leaders, etc. would become subsequent monitoring and enforcement responsibilities of of the Building Department and By-law Enforcement Branch.

d. Key Features

The key features of the requirements would be similar to those outlined in a recent American Public Works Association Special Report. [18] These would include, where applicable, with respect to any future subdivision agreement, or pursuant to an amended building code by-law, the following:

- roof top storage;
- parking lot storage;
- surcharged sewers;
- detention/retention ponds;
- underground storm detention tanks;
- limitation of storm sewer size;
- provision for surcharge manholes

COMMENT:

The report upon which this information is based was not

made available to the contractor. An abridged version, or extended summary of the report is being prepared by one of the principle authors of the study, for the contractor, with respect to the PLUARG study. When it becomes available to the contractor, it will be reviewed for supplementation of the above discussion where appropriate.

IV. BY-LAWS

A. Existing

Pursuant to the Municipal Act, municipalities have the power to pass by-laws and impose penalties. [19] Oakville and Mississauga both have general anti-nuisance by-laws, made pursuant to the Municipal Act. [20] Neither of these by-laws specifically mentions the power to hire staff or the method of funding or the provision for injunctions. However under the Municipal Act [21] any ratepayer, municipal corporation or local board can obtain an injunction to restrain any contravention of a municipal by-law. Also the common law right of private prosecution would be available to any citizen to enforce municipal anti-nuisance by-laws. [22] In addition, other by-laws exist in both municipalities, which have limited application to abating street load and runoff pollution. The following discussion will lump both municipalities relevant by-laws together and outline administration and enforcement where information has permitted. In general, most by-laws in both municipalities, except where otherwise indicated, are enforced by the by-law enforcement division. The nuisance, littering and fouling of highways by-law in Oakville, are enforced by the Halton Regional Police Department. Fines can be a maximum of $1000., [22a] but in practice are only a small fraction of this.

1. Nuisance by-law[23]

"No person, firm, or corporation shall erect or continue any manufactory or trade which is obnoxious by reason of emission of....dust....refuse or water-carried waste."

COMMENT:

Discussion with by-law enforcement officials in Mississauga indicate that this by-law has not been used since its enactment in 1952. Generally if the matter involved construction site runoff or mud tracking, it would be referred to subdivision control. [24] Because a developer's monies are usually with the city during this period, compliance is regarded as much more likely than if he was prosecuted under a by-law where a $25-75 fine would be imposed.

2. Refuse or Fouling of Highways By-Law [25]

"The fouling of any highway, by tracking onto it with a vehicle, soil, stone, debris or any combination thereof is hereby prohibited."

COMMENT

This group of by-laws is similar to the nuisance by-law and discussion on the above, is similarly applicable here. File investigation of Halton Police Records for the period January 1975 to April 1976 indicated some 28 recorded complaints generally falling into this category. These included mud tracking, emptying of crankcase oil etc. Of these complaints most were either rectified by obtaining compliance of the offender, or were unrectifiable. One charge was laid for this 16 month period and is pending in provincial court.

3. Tree Protection By-Law[26]

This by-law authorizes and regulates the planting, maintenance and protection of trees and shrubs on public lands and further authorizes the supervision of these matters by the Commissioner of Recreation and Parks. The Commissioner may, at the expense of the city, undertake the planting of trees on private property with the consent of the owner, provided that the tree becomes the property of the owner of the land on which it is planted. [27] No person is permitted to destroy any tree or part thereof, or any tree supports, attach any object or thing to a tree in a public place, or perform any construction work in a public place or highway or on property so adjacent that will affect trees without first obtaining the Commissioner's approval. [28] Any person who violates, or causes or permits a violation of these provisions is subject, upon summary conviction, to pay a fine not to exceed $1000, for each offence. [29] A tree committee is also formed to advise the commissioner on all matters pertaining to the by-law. [30] The Tree Committee is to consist of two staff appointed by the Commissioner, one representative of a committee of Council, and four citizens appointed by Council. [31]

COMMENT:

This by-law applies only to public lands in the municipality. However, it formed the impetus for the promulgation of policies, practices and regulations which, while having no prosecutional affect on private lands, has permitted the Commissioner to develop guidelines which are now included in subdivision agreements regarding tree conservation plans on development lands. Parks officials in Mississauga would like to see the by-law extended to private lands,

where most tree and other vegetation is lost due to new development pressures. As noted above, if the by-law did apply to private lands it could enhance efforts to preserve vegetation on such lands during construction activities and contribute to controlling runoff. The by-law is too new to provide any statistics on how it is being enforced.

4. Building By-Law

Such by-laws can be construed to provide for the protection of the "health, safety and welfare of the inhabitants of the municipality." [32] The City of Mississauga [33] has adopted with some deletions the National Building Code of Canada and added provisions of its own. An Inspector, appointed by the Director of Buildings, has the power to enforce all provisions of the by-law. [34] He has the power to "act on any question relative to the mode or manner of construction," the quality of construction materials for, the use and occupation of, the location of, and the maintenance of buildings and structures therein. [35] The inspector also has the power to make inspections [36] and the department of buildings an implied power to make regulations. [37] The inspector may issue stop work orders. [38] The inspector is empowered to issue permits [39] and to approve plans and specifications. [40] It is unlawful for anyone to construct, erect, enlarge, alter, remove or demolish any building or structure without a permit. [41] National Building Code standards and regulations incorporated by Mississauga include types of construction, quality and design of materials etc. [42] Any person violating any provision of the by-law will be charged with a misdemeanor, punishable upon conviction, with a fine not to exceed $1,000. or by imprisonment not to exceed six months or both. [43] Each day a violation continues shall be regarded as a separate offense. [44] Any person may appeal a decision of an inspector refusing to grant a permit with regard to the manner of construction or materials to be used. [45] Appeal shall be to a board whose members are chosen by Council, [46] and whose expertise shall be either that of a licensed professional engineer or architect, or builder or superintendent of building construction, each with at least ten years experience. [47] The by-law is silent on a right of appeal for inspectorial decisions approving the grant of a permit.

COMMENT:

From a review of the above key provisions of the by-law it is obvious that the building department has considerable powers with respect to construction activities. Though there are no express provisions for regulation and control of grading, filling and removal of natural topsoils, trees or vegetative coverings or control of erosion and runoff

without a permit, the developer's engineer must certify some of these matters pursuant to the subdivision agreement discussed elsewhere. [48] To the extent that the subdivision field control is insufficiently staffed, building inspector staff could possibly perform some of these functions pursuant to controlling water runoff pollution from construction activities. Building Department Annual Reports, [49] and discussion with officials [50] indicate that efforts have generally been directed toward the structural adequacy of buildings and not to water pollution generated from construction activities.

5. Other By-Laws

COMMENT:

Because runoff from urban streets and surfaces includes solids added from dustfall, animal droppings, sand and salt applied for ice control, leaves,cut grass and materials leached from vegetation, and a wide variety of other materials that are thrown, washed, swept or otherwise deposited on urban surfaces [51] a number of other by-laws reviewed in Oakville and Mississauga have some, though limited application. Such by-laws deal with general problems of debris, refuse, garbage etc. [52] Discussion with by-law enforcement officials in Mississauga indicate that these types of complaints are consistently the most numerous in their jurisdiction in terms of enforcement time allocated. [53] For example, the garbage by-law [54] prohibits any person from permitting garbage, rubbish, ashes, or other waste material, including paper of any description to be blown or dropped on public or private property including streets and roads. Records for complaints investigation and follow-up for 1974 with respect to this and a related by-law indicate some 500 complaints registered with the division, 440 rectified, 55 unrectifiable, 5 charges laid, 4 withdrawn, 1 conviction, fine unrecorded. [55] Given the nature and magnitude of the problem of street load runoff, these types of by-laws can be described at best as crude, bandaid controls.

B. Proposed

1. Tree Protection By-law

a. Status

Because it would apply to private lands the by-law was recently referred back to committee for further study of the implications for enforcement on private lands. [56]

a. Status

The City of Sault Ste. Marie was recently granted the power to regulate topsoil stripping by the Ontario legislature. [64] (Information was not available at the time of this writing as to whether the city had yet promulgated a by-law pursuant to its new power.)

b. Provisions

The powers granted by the legislature would permit the city to regulate the stripping of soil from land in the municipality.[65] Where top soil has been stripped from land, the city could require the land owners to rehabilitate the land[66] in one of two or both of the following manners. The land owner could be required to replace top soil in sufficient quantity and depth to raise and maintain a healthy growth of vegetation adequate to bind the soil and prevent erosion, or he could be required to plant trees, shrubs, legumes or grasses, or both.[67] The city could further require that rehabilitation of the land be carried out and maintained by the owner of the land at his expense and risk to the municipality's satisfaction and that in default of the owner carrying out or maintaining the rehabilitation, the municipality, after notice to the owner, could enter upon and rehabilitate the land at the owner's expense. [68] In those instances where the municipality carries out the rehabilitation, it would be permitted to add the cost to the collector's roll and collect the cost in the same manner as municipal taxes. [69]

COMMENT

This by-law is of potentially great significance to many aspects of runoff associated with construction activities. Pursuant to its powers to regulate the stripping of top soil, the municipality could promulgate rules, procedures and guidelines dealing with the type and manner of construction as it related to soil protection, typography of site, measures for retention of undisturbed vegetation areas during construction, etc. including, for example vegetative and soil strips, mulch or erosion control mats or blankets etc. This information will be supplemented in followup reports.

3. Development Control by-law

a. Status

This proposed Scarborough by-law was defeated by Council, April 5, 1976. [70] Its status at the present time is uncertain as it has been sent back to committee for further study.

b. Objectives

Pursuant to section 35 (a) of the Planning Act[71] the objectives of the by-law would include:

provision for excellence of design and compatibility of Borough development,

provision for completion and maintenance of developments in accordance with approved development plans including performance criteria,

to contribute to a functional, attractive environment.

c. Administration

The Department of Buildings would administrate in order that the application and issuance of building permits would be centralized. Its additional duties to include; co-ordination of final site plan and signing of agreements; provide inspection as required for all site works etc.

d. Key Provisions and Performance Criteria

The development must neither impose problems of maintenance, drainage, erosion, mud, litter;

The development shall respect and contribute to the character of areas within the Borough which are unique by virtue of natural topography, vegetation, etc.

COMMENT

Because this comprehensive by-law could control both initial construction and maintenance it could have considerable application to problems associated with runoff from construction sites. While the material available to the contractor, is silent on the need for controlling water pollution from construction runoff per se, the broad objectives and criteria could permit the Buildings Dept. to promulgate rules for inclusion in subdivision agreements to effectuate that end.

V. NON-STATUTORY CONTROLS

A. Existing

1. Environmental Advisory Board

The Mississauga body is a creation of council and reports directly to it and the Planning and Development Committee. It has no enforcement powers or responsibilities. It can deal with matters referred to it by that committee, and is presently pulling together information with respect to controlled run-off from new development and tree protection. It consists of eight citizens, three city officials and a councillor. Term of office is 2 years with half the citizen members being appointed each year.

COMMENT

The Board has convened several meetings on the question of storm water runoff. It is essentially a forum for keeping the public informed about the city's efforts in various areas of environmental concern. To the extent it could initiate investigations of its own on how new development in Mississauga is effecting the city's water-courses and catalogue and publize developer abuses and malpractices in stream and soil protection, it could serve as a positive stimulant to raising public awareness about the problem and the need for greater protective measures.

FOOTNOTES

(Municipal Controls-Urban Areas)

1. The Planning Act RSO 1970, c 349 as amended s. 19(1).

   1a. Mississauga official Plan, 1953, as amended.
   1b. See for example Mississauga by-law 5500.
   1c. Ibid.
   1d. Oakville, By-Law Quarterly Reports Oct. /75. The court actions involved outside storage in a light industrial zone area. Fines totalled $350 for two separate offences involved in violation of zoning by-law 1965-136.
   1e. City of Mississauga Council Resolution, July 22, 1974; and City of Mississauga Planning Department, "Environmental Planning Report, Volume A, Policies," April 1976.

2. Ibid, from "Environmental Planning Report" pp 25-42.

3. The Planning Act, R.S.O. 1970, ch. 349 as amended, section 33 (5) (a)

4. See, "An Environmental Plan for the Town of Oakville,", December 1975, and Progress Report No. 1, February 1976, Oakville Planning Department.

4a. S. 29(7)

4b. S. 33(14)

4c. S. 33(5)

4d. City of Mississauga, 1976 Current Budget, Programs Overview.

4e. National Housing Act. R.S.C. 1970, c. N-10 as amended s. 51(2). This section permits the CMHC to make loans "for the purpose of assisting in the construction of a trunk storm sewer system". "Trunk storm sewer system" is defined as a system for the collection and transmission of storm drainage. (s.50). Discussion with CMHC officials indicates that when monies are made available under this part of the NHA, they include monies for design and supervision and could be conceivably extended for extra inspection purposes related to preventing soil and water pollution from such activities. Interview with B. Player, Director, Municipal Infrastructure Division CMHC (for Part VIII Sewage Projects). April 28, 1976.

5. See memorandum from H. K. Watson, General Manager, Credit Valley Conservation Authority to "All Municipalities on Credit Valley Watershed regarding Zero runoff Increase, "September 17, 1975.

6. Mississauga Council directed its Engineering Planning Department to prepare a report on implementing controlled runoff on present and future plans of subdivision. October 6, 1975. This program's status will be discussed at greater length, infra. Peel Region and the Town of Oakville Councils recommended that the Conservation Authority define, and establish guidelines, standards, techniques and criteria for implementation of the "zero runoff increase" policy and hold a seminar on same. Council motions January 22, 1976 and

March 15, 1976 respectively. Peel Region was of the view that development proposals were already commented on by the CVCA; that the Region of Peel Act provides that storm drainage is the prime responsibility of Area Municipalities; and that the effect of designing storm systems to attain "zero runoff" may have substantial impact on "the degree of service" that may be rendered to subdivision developments, ie. connection of roof downspouts, requency of road floodings, dry or wet ponds etc. Report to Public Works and Planning Committees re "Zero Runoff Increase", December 22, 1975. Oakville's concerns included that; no such similar request had been received from the Halton Region Conservation Authority with whom Oakville is involved for most of its storm drainage; that several detention methods to control runoff such as roof, parking lot, ditches, ponds run counter to present practices in developments and acceptance of them by the public might be difficult to obtain; that too little is still known about detention ponds and more research necessary; that "zero runoff increase" is too high an ideal and that "controlled runoff" as an objective is more practical. Report to Public Works Committee, March 4, 1976.

7. Credit Valley Conservation Authority, Annual Reports for 1974, and 1975 at pp 8-9 and 14 respectively. Four inspections per week in 1974 to 5 inspections per week in 1975. This is on top of such other more diverse duties as reviewing municipal and zoning by-laws, Committee of adjustment applications and Land Division Committee reports, etc.

8. In any given year, Mississauga alone is processing 65-70 engineering agreements, with approximately 25-30 agreements approved and registered per year. Communication from Carl Hofferen, Chief Technologist and S. D. Lawson, Subdivision Control Engineer, City of Mississauga, April 21, 1976.

9. In 1975, the City of Mississauga alone issued permits for $239 million worth of construction. Building, Zoning and License Division, Dept. of Buildings, City of Mississauga, Annual Report 1975.

10. It is understood that while the number of inspection staff for subdivision field control is regarded as inadequate (5 inspectors), the building department apparently has more personnel. Whether building staff could be sufficiently trained to perform inspections with reference to this provision or would want to, is an unresolved matter presently.

11. GUIDELINES AND SPECIFICATIONS FOR PROTECTION OF TREES

All existing trees which are to remain shall be fully protected with snow fencing or similar structures erected under the "drip line" of trees, prior to commencement of construction. Groups of trees and other existing plantings to be protected shall be done in a like manner with snow fencing or other similar structures around the entire clump (s). Areas within the protective fencing shall remain undisturbed and shall not be used for the storage of building materials or equipment.

No rigging cables shall be wrapped around or installed in trees and surplus soil, equipment, debris or materials shall not be placed over root systems of the trees within the protective fencing. No contaminants will be dumped or flushed where feeder roots of trees exist.

The Developer or his agents, shall take every precaution necessary to prevent damage to trees or shrubs to be retained.

Where limbs or portions of trees are removed to accomodate construction work, they will be removed carefully and exposed wood treated with an approved tree wound dressing.

Where root systems of protected trees are exposed directly adjacent to or damaged by construction work, they shall be trimmed neatly and the area back-filled with appropriate material to prevent drying and desiccation.

Where necessary, the trees will be given an overall pruning to restore the balance between roots and topgrowth or to restore the appearance of the tree.

Trees that have died or have been damaged beyond repair shall be replaced by the Developer at his own expense by trees of a similar size and species or such size and species as may be approved by the Commissioner, Recreation and Parks Department.

If, grades around trees to be protected are likely to change, the Developer shall be required to take such precautions as dry welling and root feeding to the satisfaction of the Commissioner.

12. See, Contribution of Sediments and Other Pollutants to receiving Waters from Major Urban Land Development Activities, Environmental Protection Service, Department of Environment, Canada, April 1974. pp 54-56.

12a. City of Mississauga Standard Form Engineering Agreement, regarding Maintenance Periods.

13. Accounting Department, City of Mississauga, April 27, 1976.

14. Supra, note 8, Carl Hofferen interview.

15. Supra, note 12, pp. 56 and 70.

16. Accurate as of April 27, 1976. Because of its contentious nature of the report was not made available to the contractor.

17. Pursuant to City of Mississauga Council Resolutions, September 8 and October 6, 1975.

18. "Practices in Detention of Urban Stormwater Runoff", APWA Special Report No. 43, June 1974.

19. R.S.O. 1970, ch. 284 as amended, sec. 242 as 354 and 466 respectively.

20. Oakville by-law no. 1963-29; Mississauga by-law no. 1554; ibid note 19, s. 354 paragraph 120.

21. op. cite, note 19, s.470.

22. A private prosecution only provides one with the imposition of a fine not an injunction.

22a. Supra, note 19, s. 466.

23. Supra, note 20.

24. Subdivision control in Mississauga or Oakville, does not keep a ledger or other of record complaints with respect to mud or soil losses to streets, etc.

25. Oakville by-laws no. 1972-108 and 1971-122; Mississauga by-laws 9589 and 418-74.

26. Mississauga by-law no. 91-75.

27. Section 4.

28. s.6.

29. s. 9.

30. s. 10.

31. s. 11.

32. Supra, note 19, s. 242.

33. By-law 7431 as amended. Oakville incorporates the Ontario Building Code into its by-law.

34. s. 1.3.1.

35. ibid.

36. s. 1.3.4, 1.3.7.

37. s. 1.10.

38. s. 1.6.2.

39. s. 1.3.2.; 1.5.1.

40. s. 1.4.5.

41. s. 1.4.1.

42. s. 1.10 as amended.

43. s. 1.6.4.

44. ibid.

45. s. 1.8.1

46. s. 1.8.2.

47. s. 1.8.3.

48. See III A.3.d.

49. Department of Buildings Annual Reports 1963-1975 City of Mississauga.

50. Interview with K. Cowan, Director of Buildings, April 20, 1976.

51. D. H. Waller "Urban Drainage: Problems and Possibilities," from Proceedings of the Annual Conference of the PCAO, OMWA and AWWA (Ontario Section) April 20-23, 1975 Toronto. Published with the cooperation of Environment Canada, 1976.

52. See, for example, Mississauga by-laws no. 244-75; 8483; 4953.

53. See, for example, 1974 and 1975 Annual Reports for City of Mississauga, By-law Enforcement Section, Statistics on Complaints.

54. By-law no. 244-75.

55. Supra, note 53.

56. By-law no. 1976-38 s. 1. pursuant to the Town of Oakville Act, S.O. 1974 c. 152.

57. s. 2.

58. s. 3.

59. s. 5.

60. s. 6.

61. s. 9.

62. See III A. 3.b.

63. Town of Oakville Council, March 15, 1976.

64. City of Sault Ste. Marie Act, S.O. 1973, c. 205.

65. s. 2(a).

66. s. 2(b).

67. s. 2(b) (i) and (ii).

68. s. 2(c).

69. s. 2(d).

70. See, "Scarborough Kills Development By-law", The Globe and Mail April 6, 1976.

71. s. 35(a) provides for the enactment of by-law to effect control of development.