

Room 569, Fifth Floor,
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IN THE MATTER OF

The Lakes and Rivers Improvement Act;

AND IN THE MATTER OF

The proposed refusal of the application of the Corporation of the Township of Hay for approval for the location of a dam on Black Creek on Lots 19 and 20 in Concessions 4 and 5 of the Township of Hay in the County of Huron.

REPORT TO THE MINISTER OF NATURAL RESOURCES

Pursuant to an appointment of the Honourable Frank S. Miller, Minister of Natural Resources, dated the 30th day of September, 1977 the undersigned has held an inquiry as to whether the proposed refusal of an application of The Corporation of the Township of Hay in respect of a realignment of part of Black Creek is fair, sound and reasonably necessary for the achievement of the purposes of The Lakes and Rivers Improvement Act. Mr. K. IS McLean appeared on behalf of the applicant. Mr. M. W. Bader of the Ministry of the Attorney General appeared on behalf of the Ministry of Natural Resources.

The application involves a drainage work under The Drainage Act that was initiated prior to the coming into force of The Drainage Act, 1975. The proposed work is the straightening, widening and deepening of the existing channel of a part of Black Creek in Lot 20 and perhaps 19 in Concessions IV and V of the Township of Hay, measuring approximately seven-tenths of a mile. The length of the proposed new channel is 50.2 chains or approximately 3,300 feet.

The purpose of the proposed work is to drain and prevent the flooding of the agricultural lands in lots 19 and 20 in concessions IV and V. While the lands bordering the proposed work constitute approximately the equivalent of a township lot, approximately fifty acres have been used for an orchard, market gardening and the growing of white beans. These areas are flat and have a surface covering of muck soil. However, by reason of the elevations the workable areas flood in the spring and during summer rains with the result that the

vegetable crops and beans have been destroyed during the summer rains. The remainder of these lands is a swampy, wooded area. Part of the reason for recent flooding may have been the development of a natural beaver population in the Black Creek system and not only in the immediate area. In spite of the trapping program of the Ministry of Natural Resources the beaver dams and beaver houses still remain and the landowners have petitioned for a drainage works which has proceeded to the stage where the engineering report has been prepared and circulated to the various authorities, at which stage the Ministry of Natural Resources became involved, and tenders have been called for the construction of the works subject to approval by the Ministry of Natural Resources.

In this respect I might deal with one matter commented on by counsel for the applicant. He pointed out that considerable expense has been incurred and although the matter had been referred to the local conservation authority at the preliminary stage the concerns of the Ministry of Natural Resources did not become apparent until the project had proceeded to the stage when construction might have commenced. In this regard The Drainage Act indicated the intent of the Legislature that the proposal is to be referred to the Ministry of Natural Resources at the time it is also referred to other public or quasi-public bodies notwithstanding submission at an earlier stage to the conservation authority. I comment no further than to say that this sequence appears to be the procedure contemplated by the Legislature and it may well be based upon the approach that until a plan has been prepared by the engineer of the proposed work the public authorities cannot fully assess the implications of the proposal. Notwithstanding the statutory provisions, the evidence indicated that a recent administrative arrangement provides for an earlier consideration by the Ministry of Natural Resources.

Black Creek is a tributary of the Ausable River. The source of the tributary is in the Township of Tuckersmith which is east of the Township of Hay. The creek flows in a generally westerly direction through the Township of Tuckersmith and across the four easterly concessions of the Township of Hay. In the fifth concession Black

Creek turns in a southerly direction flowing through the Township of Hay and joining the Ausable River a short distance south of the boundary of that township. Around the turn of the century this north-south portion of the creek had been made the subject of a drainage work and in 1972 a drain was constructed in a northerly direction from Lot 20 in Concession V in the Township of Hay. This older drain and the 1972 drain are known as the Black Creek Drain, 1972.

An area known as the Hay Swamp borders the north-south portion of Black Creek. This is an area of approximately 4,000 acres and is a mixture of farms and swamp areas. One of the witnesses for the applicant, Hr. Jack Tinney, the Reeve of the township, farms in this area and although there are floods from time to time, these floods do not effect the agricultural industry as corn is the significant crop and the floods do not affect it according to this witness. The Ministry officials were concerned that they had heard rumours that petitions were being considered for a further drainage work through this part of Black Creek as well as the part now under consideration.

The cost of the proposed straightening, widening, and deepening of the channel of the creek was estimated at approximately \$36,000. In addition to the benefit to the landowners in concessions IV and V a number of upstream landowners are to be assessed for outlet liability by reason of the improved outlet that is proposed at the junction with the Black Creek Drain, 1972. Approximately 130 properties, in addition to road authorities and the Village of Hensall are to be assessed for outlet liability. The assessment of the Village of Hensall is significant in that it is being assessed approxiaately one-seventh of the total cost of the project. The Village of Hensall lies in Concession I of the Township of Hay and appears to include what would be lots 20 and 21 in that Concession. The right of way of the Canadian National Railways runs in a northerly direction through Concession I at a location approximately one-third of the length of the concession from the westerly limit of the concession. Approximately one-third of the village is situate to the west of the right of way. In the past the east part of the village containing approximately 125 acres has been serviced with storm sewers that outleted through

underground drains situate northerly of Highway 84, which is located on the line between lots 20 and 21 across the township. These underground drains ultimately reach the northerly part of the Black Creek Drain, 1972. This drain system is now obsolete and in reconstructing the storm sewer system it is proposed to drain the system in a southwesterly direction into Black Creek upstream of the proposed drainage work under consideration. Accordingly, the village has been assessed a substantial portion of the cost of the project. The cost of diversion was estimated at \$25,000 to \$30,000 by B. M. Ros. and Associates Limited, but no estimate had been made of the cost of reconstructing an underground drain along the site of the existing outlet which I would estimate, from scaling on the plan attached to the engineer's report of the proposed drainage work would measure in excess of two miles. The engineer for the village indicated that the village was most concerned that the proposed work be approved as a substantial saving was expected from the proposal to use Black Creek as the outlet of the storm sewer system. His submission indicated the following results of non-approval:

“.....if the drain cannot be built because of the Ministry's refusal of approval, then the drainage petitioners will object to Hensall diverting any additional water to this stream. Such objection could result in litigation. Hensall may then be in the position of having to seek an outlet to the Northwest, where flooding conditions also already exist. We are advised by members of the Hay Township Council that this routing would also require the construction of a municipal drain along some sections of the watercourse. Since the field conditions appear somewhat similar in both locations, Hensall is concerned that the Ministry may also withhold approval of this alternative drain.

The Village of Hensall requires the ability to discharge water from its proposed storm sewer system into a watercourse associated with the Black Creek watershed. It is concerned that refusal by the Ministry to grant approval of the subject application will set a precedent for similar refusals of other applications, particularly in this area.”

Before leaving this subject it may be noted that while there was evidence regarding the flows of quantities of water discharged into Black Creek there would be no effect on the creek below the

proposed drainage work as this water has in the past reached Black Creek and would flow through Hay Swamp in both systems. With reference to the effect of the additional water on the part of Black Creek above the junction there was no significant evidence except that the engineer's report states that in high flows there can still be flooding from the proposal. A second source of additional water for the part of Black Creek under consideration is the outlet from the sanitary sewage lagoons of the Ministry of the Environment servicing the Village of Hensall. Bruce Edward Boland, a surface water hydrologist with that Ministry, gave evidence that sewage lagoons have been constructed and are in the course of building up levels of water that will be discharged for the first time in the coming spring or fall depending on the time at which the lagoons are full. This discharge will increase the flow by seven per cent at the point of discharge but below the tributaries of the creek the discharge will be reduced to two or three per cent. This witness was called by the Ministry and established that the discharge to be made into the stream would not effect the utility of the creek as a habitat for brook trout. He also produced evidence of the existing habitat by reason of their monitoring program set up prior to the project.

The concerns of the Ministry of Natural Resources were outlined by Dan Mansell, the District Manager of the Wingham Administrative District who has had considerable experience in fish and wildlife conservation and municipal and other planning duties. He took the position that Black Creek is one of the few streams of the Wingham Administrative District which has an indigenous population of trout and based on stream surveys conducted to provincial wide standards the creek has been classified as a Zone 2 river. He referred to a provincial policy directive establishing the meeting of all of the angling demands in Northern Ontario and two-third's of the angling demands in Southern Ontario as one of the fisheries objectives in the province. This involves up-dating a capacity of 27 million man-days of angling to 40 million man-days by 1980. This involves a long range management strategy to preserve the natural waters and to provide a variety of habitat for anglers. For the purpose of attempting to meet

this objective and relating to the public an expression of its concern the stream classification program was devised. Following stream surveys Black Creek was classified as a Zone 2 river, namely a stream in which there is a significant population of species of game fish other than salmonides having qualities of water that, with some management, would improve the classification to that of a Zone 1 river where the standards are a maximum summer temperature of 68 degrees Fahrenheit and a significant population of silmonides. The Ministry was concerned that the quality of the part of Black Creek would depreciate significantly with the straightening of the stream. The natural habitat would disappear and with the clearing of the 75 foot area along the new channel the cover would disappear reducing the quality of the habitat and increasing the temperature of the water. The Ministry was also concerned that erosion would occur by reason of the muck soil conditions and the position of the Ministry was that with the removal of beaver dams the habitat could be restored to its original condition and the adjacent agricultural owners could be returned to the same conditions as had existed prior to the arrival of beavers.

In cross-examination of this witness it was brought out that the part of Black Creek in question does not have an excellent habitat for brook trout. The readings from the stations at which stream surveys have been conducted show that in only one of the five stations, which was a considerable distance upstream, was a fish of this species found. The readings indicated that the creek is polluted by cattle, contains algae blooms, and has a PH reading in excess of the levels recommended for fish. He also admitted that in administering The Lakes and Rivers Improvement Act there would obviously be on occasions a conflict between the purposes of the Act and other interests. He admitted that there should be a balancing of these interests but stated that his approach was that his mandate was based on fish rather than people and in making his assessment of the project he merely applied considerations applicable to the utilization of the part of the creek for the purposes of fish habitat and made no attempt to weigh the conflicting interests.

Rene Jones, the District Biologist, gave evidence on the quality of the part of Black Creek under consideration for the purposes

of fish habitat. He indicated that Black Creek is not an excellent trout habitat but that the part under consideration could provide suitable habitat for parts of the year. His evidence indicated that there were some temperatures in excess of the ideal temperature for brook trout.

He produced a chart of the average monthly temperature from 1966 to 1977 for Station H2 which is situated upstream of the proposed works and between concession. 11 and 111. This record shows an average temperature of 17.4 degrees for June, 19.9 degrees for July, 19.5 degrees for August and 16.2 degrees for September. The chart shows high readings of 26.5 degrees for June, 22.5 degrees for July, 24 degrees for August, 21 degrees for September and 17 degrees for October. Contrasted with these temperatures the witness indicated that 15.5 degrees is the ideal temperature for trout, that between 18 and 20 degrees trout show signs of stress and above 20 degrees trout can only exist for short periods.

He produced photographs of the stream, Exhibit 11, indicating areas of potential habitat that would be destroyed in the event the project were approved. He also showed areas where erosion had occurred and expressed concern that with the increased velocities of the stream erosion would be increased. His position was that the habitat could be maintained and improved and can, with management, provide a suitable habitat for trout. Upon cross-examination he admitted that the PH level was one which would create a stress on trout and suggested that perhaps the agricultural industry, such as cattle lots, may have contributed to this condition.

With reference to the matter of erosion the evidence of Arthur William Clark, Professional Engineer, who prepared the engineer's report, indicated that it was proposed to create a large curve at the junction of the new channel and the north-south channel which currently intersect at approximately ninety degrees. He further indicated that from his examination of the soils there is a hard clay underneath a level of approximately one to one and one-half feet of highly organic soils and he did not contemplate any significant erosion problems in connection with the proposal.

With reference to the facts, there is little dispute in the evidence. One area of difference was the matter of erosion and on this aspect I accept the evidence of the engineer as he had attended on the site and the evidence of the Ministry was based on reference to a general survey of soil types.

The submission on behalf of the Ministry was that there was a conflict of public interests between the landowners in the local municipality and the province and that the government policy in respect of fisheries objectives included the up-grading of Zone 2 rivers to the higher category. It was submitted that with the removal of beaver dams and houses the amount of flooding of the land should be marginal as the evidence indicated that there was only a risk of flooding in March or April. In my view this approach was not supported by the evidence as the evidence clearly established that crops of beans or vegetables had been destroyed by summer rains.

It was submitted that the risk of the dangers of this project which removed existing habitat and cover and would increase the temperatures should not be permitted and that the status quo should be preserved to permit the part of Black Creek in question to become a Zone 1 river. It was also submitted that the project did not assure the complete removal of the beaver and that further monitoring would be necessary in this regard and in effect the approach would not cure the beaver problem. It was further submitted that the fact that the petition for drainage work had not been made in the past was evidence that there had been no previous problem and that the applicant should have petitioned years ago if any problem had existed. In passing I might comment with regard to the issue of beaver that from the Ministry's point of view it seems that the best that can be said for this argument is that the plans and specifications are not adequate and as I have been asked to consider the matter of location only, I do not comment thereon except to note that it appears somewhat unbecoming for the Ministry that has unsuccessfully attempted to control the beaver situation for at least two years, to condemn another public body's approach on the basis of a lack of an assurance of elimination of a nuisance beaver population. With reference to the matter of failure to petition on an earlier occasion the argument appears to be based on some

sort of estoppel and I have no reason to believe that failure to apply under The Drainage Act would constitute an estoppel against a future application.

The submission for the applicant was that the township had expended funds in processing the petition to the current stage and by virtue of The Lakes and Rivers Improvement Act, the effect of which had not been reflected in The Drainage Act, the township is in a position not of its creation of a considerable expenditure being thrown away by reason of lack of approval under The Lakes and Rivers Improvement Act. It was suggested this part of Black Creek should not be classified as a Zone 2 river as it is not suitable for trout habitat by reason of pollution, temperature and PH levels and that there was no evidence of existing trout populations or reasonable expectation of any future trout populations. It was submitted that the issue is the saving of public costs as contrasted with the loss of questionable habitat.

In attempting to balance the conflicting concerns there is on one hand an obvious, significant loss of approximately seven-tenths of a mile of Zone 2 habitat which with intensive management would be raised perhaps to a Zone 1 classification. I noted that counsel for the applicant adopted a comparatively large unit of measurement in referring to the length of the part of the creek affected and attempted to create the impression that there was a minimal amount of change by referring to the length of two hundred rods. Notwithstanding this approach, in my opinion a significant quantity of habitat would be affected. However, both the temperature problem and the PH problem would have to be dealt with and it would seem that the prospects for improvement without an acquisition program or management agreement program are most unlikely.

Coupled with this concern is the probability of increased demands for further channelization through the Hay Swamp. While the storm sewage flows currently reach the swamp there was no evidence to indicate how significant the increased flows from the sanitary sewage would be but I conclude that with respect to this project, there is no intent of the government departments to prevent the discharge from the sewage lagoons. Accordingly, it would seem that any additional

discharge from this source is already committed to the Hay Swamp area and through the part of Black Creek under consideration. Hopefully this discharge can be controlled in periods of high flow but there is nothing in the evidence to assure me that such was the case and if there is any significance to the additional flow from the sewage lagoons it can only be that the flooding problem in the part of Black Creek under consideration stands to be aggravated. However, as far as the effect on Hay Swamp is concerned there was no evidence to indicate that there would be a significant increase in the past flooding which, according to the reeve, did not seriously damage agricultural activities on his farm, which I assume from want of evidence to the contrary, were representative of the agricultural pursuits of that area.

On the other hand the proposed works will provide a significant improvement to the agricultural lands adjacent to the works. Although there was no evidence on value, I expect that the lands will become of greater value and provide a significant industry in the specialized area of market gardening and related activities. Also approximately 130 properties will be improved with a better outlet. The Village of Hensall will save a considerable amount of money in connection with its storm sewage system.

The key purpose of The Lakes and Rivers Improvement Act on which the Ministry relied is clause c of subsection 1a which reads as follows:

“1a. The purpose of this Act is to provide for the use of waters of the lakes and rivers of Ontario and to regulate improvements in them, and to provide for:
.....
(c) the use, management and perpetuation of the fish, wildlife and other natural resources dependent on such waters;”.

Under section 6 of The Game and Fish Act the Ministry has the right to acquire or expropriate land for the purposes of “management, perpetuation and rehabilitation of the wildlife resources in Ontario” and to enter into agreements with landowners respecting the management of the land for such purposes. It is noted that there is a significant

distinction between the two legislative provisions in that the provision involving compensation of landowners i.e. The Game and Fish Act extends to rehabilitation but the concept is not included in the purposes of The Lakes and Rivers Improvement Act . Apart from The Lakes and Rivers Improvement Act or agreement, I know of no law that requires a landowner to use or manage his lands either wholly or in part as habitat for fish or wildlife or to return to such use land that has been developed or used as agricultural land. As indicated above the purposes of that Act do not extend to rehabilitation and this concept in so far as legislation is concerned is dependent on an agreement or acquisition at public expense. Accordingly the argument of the Ministry in so far as it relates to the upgrading of the stream or rehabilitation, cannot be founded on a purpose of The Lakes and Rivers Improvement Act and a consideration of the implementation of the provincial fisheries objective of increase of Southern Ontario angling opportunities, in so far as this case is concerned would have to be considered to not be relevant to the issue at hand. Accordingly any valid argument on behalf of the Ministry would be related only to the use, management or perpetuation of the existing habitat and in weighing the conflicts the merits of the fish habitat ought to be considered only in the light of its existing capacity. If the approach of the Ministry is to upgrade the quality of the habitat, it can implement the approaches available to it under The Game and Fish Act.

During the hearing I invited the District Manager to provide me with some evidence or standard on which I might compare the concerns of the Ministry with the benefits that would flow from the proposed drainage work. He was unable to provide me with any basis on which I could quantify the concerns of the Ministry on an economic or any other approach.

One might approach this matter solely on the basis that there are a great number of properties in the three townships and the village that will be enhanced by the proposed work in addition to the land benefited by it. There was no evidence on which one could compare or weigh the interest of the landowners with or against the interest of the other members of the public of Ontario in whose interest the

provisions of The Lakes and Rivers Improvement Act have been enacted. It is easy to say that there are three classes of interest as contrasted with only one class of interest opposing the application. On a numerical approach, such an apparent overweight becomes blurred if one were to attempt to assess the number at classes or persons included in the general public that would have a concern.

While there was no precise evidence of dollar implications I can only conclude from the general aspects of the evidence, that on an economic basis the interests represented by the applicant have a greater monetary expectation than could be expected from retaining the existing habitat in its present condition. While there will be a loss of natural aesthetics from the creation of a straight channel and its cleared areas on either side and the resultant change in the appearance and nature of the swamps (of which there was no evidence) caused by changes in the water table, there was no evidence of any serious environmental degradation in the nature of the addition of pollutants. The precedential implications are counterbalanced in that the Village of Hensall was concerned that a refusal would set a precedent against future municipal sewage works and the Ministry was concerned that if this application is approved, it would be difficult to refuse any subsequent applications with the end result that all fish habitat, which was limited in extent in that district, would be vulnerable.

It is readily apparent, based on the evidence produced at the hearing, that the short term economic benefits, to both the lands of the petitioner and the lands benefited by the proposed work far outweigh any short term economic benefits of retaining the seven-tenths of a mile of natural stream in its existing condition i.e. to maintain the existing habitat. With reference to long term concerns of the proposed works, there was not, and it may not be possible to produce, evidence other than broad generalities of loss of natural habitat and water retaining capacities. In this regard clause d of subsection 1a of The Lakes and Rivers Improvement Act establishes the preservation of natural amenities as a purpose of that Act. On the other hand, the definition of "drainage works" in paragraph 11 of section 1 of The Drainage Act, 1975 continues to include "the improving of a natural watercourse."

However under section 5 of The Drainage Act, 1975 upon receipt of a petition, the municipality must give notice to the conservation authority or in the absence of a conservation authority, the Ministry of Natural Resources. Under section 6 an environmental appraisal can be required by the conservation authority or the Ministry of Natural Resources. Through this device the environmental implications of a drainage works can be considered. However, by section 125 if a petition is initiated under The Drainage Act that Act continues to apply to the petition and accordingly the new procedures while applicable to future casesould not be applicable to this case.

Accordingly and assuming that natural amenities and the use, management and perpetuation of fish, wildlife and other natural resources fall within the scope of an environmental appraisal, the Legislature has expressed some intent to support the long term concerns raised by the Ministry of Natural Resources in the case. However, in view of the fact that the application is governed by The Drainage Act, the absence of evidence to quantify the long term concerns and the future addition to the flows of the relevant part of Black Creek by the Ministry of the Environment, which would increase flooding during spring thaws and summer rainfalls if discharges were made at such times, but with considerable personal reservations as to the length of the part of Black Creek affected, I recommend that the location of the proposed dam be approved under The Lakes and Rivers Improvement Act .

DATED at Toronto this 10th day of February, 1978.

Original signed by G.H. Ferguson

G. H. Ferguson.