

CLEARWATER LAKE WATERSHED BASIN

REPORT ON

SURFACE WATER QUALITY CLASSIFICATION

THE CLEAN ENVIRONMENT COMMISSION

FEBRUARY 3, 1989

T A B L E O F C O N T E N T S

	<u>PAGE</u>
BACKGROUND	1
The Surface Water Quality Objectives and Classification Program	2
HEARING PRESENTATIONS	3
Mr. Dwight A. Williamson, Environmental Management Division	3
Mr. Bill Burbridge, Hudson Bay Exploration and Development	7
Mr. Bert Hutton, Secretary, Cottage Owner's Association	7
Mr. Rod MacCharles, Parks Branch Regional Manager	8
Ms. Kathy Sangster, Carpenter's Clearwater Lodge	9
Mr. Ed Johanson, Manitoba Environmental Council	9
Mr. John Bodnar, Moose Lake Indian Band	10
CONCLUSION	12
RECOMMENDATION	12

CLEARWATER LAKE WATERSHED BASIN
REPORT ON SURFACE WATER QUALITY CLASSIFICATION

BACKGROUND

On July 4, 1988, the Honourable Ed Connery, Minister of Environment and Workplace Safety and Health, requested The Clean Environment Commission to conduct public hearings to ensure that there was full public participation and discussion of a proposal developed by the Environment Department to designate Clearwater Lake a "high quality" water body under the Manitoba water quality objectives program.

Following receipt of this request, the Commission, in cooperation with the Department, distributed copies of the proposal document, Classification of Clearwater Lake, Manitoba: High Quality Designation, Manitoba Surface Water Quality Objectives, to all interested parties, including government departments and private industry. Copies of the proposal and supporting documents were also deposited in the public library in The Pas to facilitate local public access. Notice of the hearing was published in the Opasquia Times in The Pas and in the Winnipeg Free Press. The hearing took place in the Wescana Inn in The Pas, November 7, 1988 at 7 p.m. with approximately 30 persons in attendance.

In his letter to the Commission, Mr. Connery referred to hearings held by the Commission in The Pas on April 13 and 14, 1987 concerning a proposal by the Parks Branch for a new sewage treatment lagoon to service the

cottage owners, tourist resorts and campgrounds in the Clearwater Lake Provincial Park. These hearings had been heavily attended and a large number of objections had been received concerning the proposed discharge of treated sewage effluent to Clearwater Lake, via wetland and another small water body, (Campbell Lake). The outcome of that hearing was a Commission order prohibiting direct discharge of effluent from the sewage lagoon system to the Clearwater Lake drainage area. The Parks Branch subsequently withdrew their proposal pending preparation of a new plan.

If the Saskatchewan River watershed, which includes Clearwater Lake, had been classified previously under Manitoba's established watershed classification program it is likely that Clearwater Lake would have received the designation of a "high quality" water body and under such designation the Parks Branch design for sewage treatment and discharge might have been different to that which was proposed.

The Surface Water Quality Objectives and Classification Program

Surface waters of Manitoba are used for many purposes including domestic and industrial consumption, agricultural use, and recreational pursuits, as well as providing the natural environment for aquatic flora and fauna. Surface waters can be degraded by waste disposal and land use practises. In order to protect existing water quality, and to achieve harmony between the various uses, surface water quality objectives were developed in

1979 and revised in 1987. These objectives define minimum levels of quality for each of the uses that require protection. Certain waters can be provided greater protection and other waters will be maintained in their natural pristine state.

Watershed classification is a second facet of this program under which the uses of a body of water are identified and objectives are applied that will protect those uses. For the application of a suitable classification to a specific water body, appropriate information is organized by the Department following which the Clean Environment Commission holds public hearings to provide an opportunity for all interested parties to participate in this process.

The Clearwater Lake "high quality" water classification proposal was developed as a part of this program.

HEARING PRESENTATIONS

Mr. Dwight A. Williamson, represented the Department of Environment and Workplace Safety and Health and outlined the proposal to classify the Clearwater Lake watershed region as a "high quality" water body under Manitoba's surface water quality management system. He sketched the background of the water quality classification system and its objective to protect the quality of the water resources of Manitoba. He described the methodology inherent in developing and implementing the system. He pointed

out that, in addition to the use of objectives with numerical values designed to protect various uses, there were two categories identifying a higher water quality designation. These were the "exceptional value" classification for pristine waters in remote locations and "high quality" for water bodies, such as Clearwater Lake, where it was desired to preserve superior quality while recognizing that existing development need not be incompatible with this aim.

In relation to any proposed future developments, the high quality classification would require stringent assessment of alternatives and a comparison of the costs and benefits. It would specifically require the best available treatment of wastes from developments regardless of the cost of such treatment. These additional requirements, designed to keep the risk of water quality deterioration as close to zero as possible, would impose additional costs on the developer.

Mr. Williamson referred to the Campers Cove lagoon hearings in The Pas in 1987. The unanimous public reaction against any risk of water quality degradation triggered action by the Environment Department to initiate the classification proposal to provide this additional level of protection to Clearwater Lake.

He noted that, in principle, waters being considered for the "high quality" classification should possess biological, chemical and physical qualities better than the normal objectives. While his Department would have liked to have obtained more data, it was evident that Clearwater Lake met these criteria and the Department intended to proceed with an extensive

baseline water quality monitoring program in 1989. Secondly, a "high quality" water body should have outstanding recreational value, and this condition was also met by Clearwater Lake, especially with regard to the sport fishery. Thirdly, the "high quality" designation would normally be applied to waters within a provincial or national park. This criterion also was met and local use had been restricted to cottage and lodge developments.

Implementation of the proposal would mean that measurable degradation of water quality should not occur as a result of future human activity. This aim would apply principally to new activities although local programs undertaken by the Environment Department and the Parks Branch assured that sewage collection systems at existing cottages were being upgraded. (In this regard the regional environment officer stated that only a handful of the 200 hundred or more individual wastewater systems were not serviced by collection tanks.) All existing water uses for which the lake was suitable would be protected by the proposed classification as would all stages of existing resident lake organisms. Finally, the classification being proposed would require the best available combination of waste control including best available treatment, land disposal, re-cycling and best management practices to reduce or avoid the creation of wastes requiring disposal.

The eventual implications of the proposed classification were difficult to predict. Advantages would include preservation of the water quality and the flexibility to trade off the absolute 'no risk' protection for major developments that were deemed desirable after careful consideration. Disadvantages would include the possibility that some developments might not

be permitted or would be required to take additional costly measures to protect the environment. Also, its adoption would impose additional expense for the prospective developer to provide, in advance of construction, a detailed environmental impact assessment and justification of the anticipated impact, a description of the amelioration proposals and the benefits of the development as well as the additional costs associated with minimizing the impact, by waste treatment and other measures. The development would be permitted only if the best available treatment methods were used, as contrasted with the requirement for the 'best practicable technology' frequently required elsewhere in the Province. As an example, it was conceivable that, for logging, the one-hundred-metre uncut buffers already required would have to be widened where necessary to prevent soil erosion.

In summary, Clearwater Lake was considered to be an ideal candidate for the "high quality" designation. This designation would allow the recognition that a certain amount of development was already in place and that new development could be considered. It also recognized the Lake's outstanding quality and appeal and provided additional protection for these values.

In answer to questions, Mr. Williamson restated the Department's intention that a baseline survey of water quality in the lake would be undertaken during 1989. He also noted that there was no guarantee that faulty wastewater collection tanks could not be operated, although sewage systems were inspected to determine compliance with regulations.

Mr. Bill Burbridge represented the Hudson Bay Exploration and Development Co. Ltd. He reported that contractors working for his Company had undertaken test drilling within the Clearwater Lake watershed, in some cases drilling through the ice in winter. His Company was not concerned about the proposed classification of the Lake. They were accustomed to working in areas assigned a high degree of protection, having drilled some 250 holes in Reed Lake over many years where a mine was subsequently established on the south shore of that Lake. This area is within a Provincial Park and on a water body designated as "non degradation". Certainly the costs of drilling and mining would be higher but this was a cost of doing business. He expressed some concern about the requirement for "best available technology", but was pleased that the "high quality" designation recognized that mineral exploration was an activity that could continue. Hudson Bay was one of three parties conducting exploration within the Clearwater Lake watershed region and his Company was always ready to listen to complaints about any of their activities. He noted that much of the exploration work had been completed and, as no ore body had been discovered within the region, it was probable that mineral exploration activity by his Company would decline in ensuing years.

Mr. Bert Hutton, Secretary of the Clearwater Lake Cottage Owners' Association stated that his Association was in favour of Clearwater Lake being designated as a high quality lake. He confirmed that the Association favoured all owners carrying out their waste disposal in accordance with instructions issued by the park authorities.

Mr. Rod MacCharles, Parks Branch Manager for Northern Manitoba stated that the Department of Natural Resources supported the designation of Clearwater Lake as a "high quality" surface water body and was prepared to take whatever steps were necessary to comply with this designation. In a discussion precipitated by questioning, he confirmed it was his Department's intention to phase out both the Hugo Bay and Pioneer Bay sewage lagoons, after a new sewage facility was built to serve the Park.

Concerning resource extraction in the Park, he noted Clearwater Lake Park was designated as a recreational park and so recreation was the use assigned the highest priority. Resource extraction, where allowed, would not be permitted to compromise the recreational value of the Park. Timber permits, for example, were normally reviewed by a fisheries biologist and a wildlife biologist of the Department, as well as by the regional parks manager. As noted in the proposal document, one hundred metres "and more if required" of buffers of uncut trees were retained along tributary streams as well as along the lake shore to protect the feeder streams and to prevent erosion. Large areas of the Park were not immediately adjacent to the Lake and, owing to the proximity of the Manfor paper mill, stands of timber of harvestable quality were potentially of considerable commercial value. A commitment had been made to honour existing timber sales in that area. Each situation was reviewed and the buffer widths would be determined individually. In an area where there should be no cutting, cutting is not permitted. There was continuous replanting of seedlings carried out by the Forestry Branch of the Department of Natural Resources.

In answer to a question, Mr. MacCharles was unable to give assurance about the possible use of herbicides for forestry management purposes; however, subsequent to the hearing, he wrote to the Commission advising that all Branches of the Department of Natural Resources have not and will not approve the use of herbicides within the Clearwater Lake Provincial Park by any agency including crown corporations and government departments.

Ms. Kathy Sangster represented Carpenter's Clearwater Lodge, located within the Park. She stated that the Lodge operators were completely in favour of the "high quality" designation being extended to Clearwater Lake. She noted that a provision of the classification was that, where existing treatment systems were not violating standards, they should be allowed to continue in operation. The Lodge would immediately begin use of the new park lagoon when it was constructed. Ms. Sangster complained about a black, oily mess left on the ice after exploration drilling done in the past. This indicated a lack of concern for Clearwater Lake by the mining industry. The new designation could not come too soon. She stated that the Lodge had a 45,000 litre sewage holding tank and used its own truck to carry liquid waste to the Hugo Bay sewage lagoon in accordance with instructions received from the Parks Branch.

Mr. Ed Johanson appeared on behalf of the Manitoba Environmental Council and also on his own behalf as a cottage owner at Clearwater Lake. In his presentation for the Council, he stated that the Council concurred with the proposal to designate the Lake "high quality" and supported the concept of protecting the quality of the water resource for the residents of The Pas and all Manitobans.

On his own behalf, Mr. Johanson referred to a plan for the withdrawal of water from the Lake as a municipal water supply for The Pas. This proposal had been around since 1914 and was renewed recently. He also stated that cottagers were very concerned with the prospect of mining development and any surface mining development should take place outside the watershed even if an ore body extends underneath the Lake. This had been done elsewhere.

Mr. Johanson called for a park development plan and emphasized the need to get a new sewage lagoon into operation, since this development had already been delayed for a year. He felt that it was necessary to define the carrying capacity of the Park, where 350 cottages were now in place. Should additional cottages and lodges be permitted? It was to be expected that the Indian Band would wish to develop the tourist potential of their area of the watershed before long. The status of private land holdings in the Park should be reviewed. He questioned whether, after recent staff cuts, the Parks Branch employees would be able to carry out effective enforcement of existing regulations. This would be an important factor in implementing the proposed classification.

Mr. John Bodnar appeared as a representative of the Moose Lake Indian Band, The Swampy Cree Tribal Council and of Mr. Lawrence Whitehead. He delivered an extensive written submission to the Commissioners. It became clear that the parties represented by Mr. Bodnar had considerable anxiety about effluent discharge from the new sewage lagoon facility expected to be proposed by the Parks Branch to serve the Provincial Park. The expectation was that the drainage would be directed outside of the Clearwater Lake watershed, as earlier required by the environmental licence. All of the

material contained in this submission pertained to this point.

There was concern on the part of the people living on the Cormorant Lake-Moose Lake watershed that if the lagoon effluent was directed outside the Clearwater Lake water basin it would have to flow into one of the creeks tributary to Moose Lake. This possibility was strongly opposed. Attention was drawn to Grace Lake, which received effluent from The Pas town lagoon system and had resulted in additional enrichment of the lake. The injustice of redirecting the effluent from the Clearwater Park, via Frog Creek or another channel, to Moose Lake would be reflected in the expected deterioration in the quality of the water supply and a resulting adverse effect on the entire lifestyle and livelihood of the inhabitants of this area. These were based, to a major extent, on the quality of the water in Moose Lake. There were already grievances about continuing water quality deterioration downstream of The Pas, including those resulting from the flooding of the Cedar Lake area in 1964 following construction of the Grand Rapids hydro dam.

The Chairperson pointed out that the present hearing was intended only to consider the proposed classification of the Clearwater Lake watershed and not to consider the possibility and ramifications of a new sewage lagoon proposal which, in any case, had not yet been registered by the Parks Branch. When such a proposal was made it would have to be registered with the Environment Department and advertised. A public hearing would then be held if concerns were expressed and there would be ample opportunity for Mr. Bodnar's clients to state their concerns at that time.

CONCLUSION

The Commission concludes, on the basis of the evidence received and of the representations made, that the proposal to classify Clearwater lake as a high quality water body meets the criteria of the Manitoba Surface Water Quality Objectives document. The proposal received the support of all persons and organizations making presentations to the Commission, including private citizens and representatives of industry and government departments.

RECOMMENDATION

The Commission recommends that the Clearwater Lake Watershed Region be classified "high quality", in accordance with the Manitoba Surface Water Quality Objectives and Watershed Classification Program.