ALBERTA ENVIRONMENTAL APPEALS BOARD

Report and Recommendations

Date of Hearing – October 18, 2007 Date of Report and Recommendations – November 15, 2007

IN THE MATTER OF sections 91, 92, 94, and 95 of the *Environmental Protection and Enhancement Act*, R.S.A. 2000, c. E-12, and section 115 of the *Water Act*, R.S.A. 2000, c. W-3;

-and-

IN THE MATTER OF appeals filed by M. G. Slemko and L. L. Slemko with respect to *Water Act* Licence Amendment No. 00153082-00-01 issued to Elkwater Water Co-operative Ltd. by the Director, Southern Region, Regional Services, Alberta Environment.

Cite as:

Slemko v. Director, Southern Region, Regional Services, Alberta Environment, re: Elkwater Water Co-operative Ltd. (15 November 2007), Appeal Nos. 06-086 & 06-087-R (A.E.A.B.).

HEARING BEFORE: Dr. Steve E. Hrudey, Chair,

Mr. Ron V. Peiluck, Vice-Chair, and Mr. Alex MacWilliam, Board Member.

SUBMISSIONS BY:

Appellants: Mr. Marshall G. Slemko and Ms. Linda L.

Slemko.

Director: Mr. Dave McGee, Director, Southern Region,

Regional Services, Alberta Environment, represented by Ms. Charlene Graham, Alberta

Justice.

Licence Holder: Elkwater Water Co-operative Ltd., represented

by Mr. Robert Pender, President.

WITNESSES:

Appellants: Mr. Marshall G. Slemko and Ms. Linda L.

Slemko.

Director: Mr. Dave McGee, Director, Southern Region,

Regional Services, Alberta Environment, and Mr. Ian Franks, Engineer, Alberta

Environment.

Licence Holder: Mr. Robert Pender.

INTERVENORS BY WRITTEN

SUBMISSIONS:

Intervenors: Ms. Evelyn Schuler; and Dr. David J. Carter.

No submission provided: Elkwater Community Association, represented

by Mr. Len Knowles.

BOARD STAFF: Mr. Gilbert Van Nes, General Counsel and

Settlement Officer; Ms. Valerie Myrmo, Registrar of Appeals; Ms. Marian Fluker, Associate Counsel; and Mr. David Burns,

Student-at-law.

EXECUTIVE SUMMARY

Alberta Environment issued Licence Amendment No. 00153082-00-01 to the Elkwater Water Co-operative Ltd. in relation to the diversion of water from Elkwater Lake. The Board received Notices of Appeal from Mr. Marshall G. Slemko and Ms. Linda L. Slemko.

The Board heard arguments on two issues:

- 1. What is an appropriate cut off level to allow for the diversion of water from Elkwater Lake?
- 2. Is additional clarification regarding the term "water conservation measures" required, and if so, how should it be defined?

The Board recommended the Licence Amendment be confirmed as issued to the Elkwater Water Co-operative Ltd. The Board found the Licence Amendment provided a reasonable balance of the interests of all the parties while satisfying the requirements of the *Water Act*. The Board found the graduated reductions in allowable water use in the Licence Amendment were implemented to conserve water in Elkwater Lake while providing a more reliable water source for the Elkwater Water Co-operative members. The Board found that it was not necessary, in these circumstances, to define water conservation measures in the Licence Amendment, because the water usage reduction specified dictates that conservation must be achieved. The Board recognized that the members of the Elkwater Water Co-operative were aware of the importance of practicing, and were practicing, water conservation measures, and the specific measures to be used for conservation can change over time as knowledge and experience increases. Finally, the Director has authority under the *Water Act* to amend the Licence, if warranted, to address any concerns regarding proper water conservation measures.

TABLE OF CONTENTS

I.	BACKG	ROUND	1
II.	SUBMIS	SSIONS	5
	A.	Appellants	
		1. Mr. Marshall Slemko	5
	B.	Licence Holder	7
	C.	Director	8
	D.	Intervenors	12
		 Ms. Evelyn Schuler Elkwater Community Association Dr. David J. Carter 	12
III.	DISCUS	SSION	14
	A.	Cut Off Level	14
	B.	Water Conservation Measures	18
	C.	Other Matters	20
IV.	RECOM	IMENDATIONS	21
V.	COSTS.		22

I. BACKGROUND

- [1] On February 28, 2007, the Director, Southern Region, Regional Services, Alberta Environment (the "Director"), issued Licence Amendment No. 00153082-00-01 (the "Licence Amendment") under the *Water Act*, R.S.A. 2000, c. W-3, to the Elkwater Water Co-operative Ltd. (the "Licence Holder" or "Co-operative"), in relation to the diversion of water from Elkwater Lake near Cypress Hills, Alberta.
- [2] On March 26 and 28, 2007, the Environmental Appeals Board (the "Board") received Notices of Appeal from Mr. Marshall G. Slemko and Ms. Linda L. Slemko (the "Appellants") appealing the Licence Amendment.
- On March 28, 2007, the Board wrote to the Appellants, the Licence Holder, and the Director (collectively the "Parties") acknowledging receipt of the Notices of Appeal and notifying the Licence Holder and the Director of the appeals. The Board also requested the Director provide the Board with a copy of the records (the "Record") relating to these appeals, and that the Parties provide available dates for a preliminary meeting, mediation meeting, or hearing.
- [4] According to standard practice, the Board wrote to the Natural Resources Conservation Board and the Alberta Energy and Utilities Board asking whether this matter had been the subject of a hearing or review under their respective legislation. Both boards responded in the negative.
- [5] On April 10, 2007, the Board received a telephone call from the Licence Holder providing available dates, advising it did not believe mediation would be successful, and requesting the Board proceed directly to a hearing.
- On April 20, 2007, the Board received a copy of the Record from the Director, and on May 2, 2007, the Board forwarded a copy to the Appellants and the Licence Holder. The Director also requested the Board determine the issues for the appeal before proceeding to a hearing or mediation.

[7] On April 24, 2007, the Board received a letter from the Appellants requesting further information and documents.¹

On May 2, 2007, in response to the Director's April 20, 2007 letter, and subsequent telephone conversation with the Licence Holder on April 26, 2007 regarding mediation, the Board wrote to the Parties advising it had decided to schedule a written submission process to determine the issues of the appeals prior to proceeding to a hearing. The Board gave the Parties an opportunity to provide any further preliminary motions by May 9, 2007. The Board also asked the Licence Holder and the Director if they were in a position to provide the additional information requested by the Appellants.

[9] On May 3, 2007, the Board received a telephone call from the Appellants regarding the deadline to provide their preliminary motions to the Board. The Appellants also advised they would have liked the Board to proceed to mediation. As a result of the telephone conversation, the Board wrote to the Parties on May 7, 2007, extending the deadline for the Parties to provide further preliminary motions to the Board until the Appellants had an opportunity to review the Record and any additional information that may be provided to them. The Board also addressed the issue of mediation and advised:

"...All participants are free to provide the Board with their requests for process and the Board will make the final decision on how it will proceed with an appeal. In this case, the Board decided not to conduct a mediation meeting because the Elkwater Water Co-operative indicated they do not wish to participate in mediation. Mediation is a voluntary process which is usually only successful and productive if all participants are willing to participate...."

The Appellants requested the following documents:

[•] Elkwater Water Co-operative Ltd. By-Laws;

[•] Number of allowable membership with list of members and shares held;

[•] Monthly water consumption of the Elkwater Co-operative during 1988 and March 2007;

[•] Summary of Water Oxygen Concentration in Elkwater Lake;

[•] Full size copy of Hydrographic Survey of Elkwater Lake showing the Elkwater Lake Co-operative outlet and the revised present main lake boat dock; and

[•] Full size copy of updated Hydrographic Survey marked in color to illustrate the depth rings of the entire lake.

On June 8, 2007, the Licence Holder provided a copy of its by-laws, but noted it would not provide the membership list and it did not have the additional documents requested by the Appellants. On June 20, 2007, the Appellants clarified that the Director should have some of the information and the manager of Cypress Hills Interprovincial Park would be able to provide additional information. Additional documents were provided by the Director and the Prairie Farm Rehabilitation Administration on July 6, 2007, and from the Manager of the Cypress Hills/Writing on Stone Provincial Park on July 19, 2007.

[11] As the Board did not receive any further preliminary motions from the Parties, the Board scheduled the written submission process to determine the issues for the appeals. The Parties provided their initial written submissions on June 15 and 18, 2007, and on June 22 and 25, 2007, the Board received response submissions from the Licence Holder and Director. The Appellants did not provide a response submission.

[12] The Board released its decision on the issues on August 7, 2007,² advising that the issues at the Hearing would be:

- 1. What is an appropriate cut off level to allow for the diversion of water from Elkwater Lake?
- 2. Is additional clarification regarding the term "water conservation measures" required, and if so, how should it be defined?

[13] On August 16, 2007, the Board confirmed that the Hearing would be held on October 18, 2007, in Medicine Hat, Alberta. The Board also set the submission process for the Hearing.

The Board placed a Notice of Hearing in the local newspapers and requested those persons interested in intervening at the Hearing to submit their request to the Board by September 6, 2007. The Board received intervenor requests from Ms. Evelyn Schuler, the Elkwater Community Association, Dr. David J. Carter (collectively, the "Intervenors"), and

See: Preliminary Motions: *Slemko* v. *Director, Southern Region, Regional Services, Alberta Environment*, re: *Elkwater Water Co-operative Ltd.* (07 August 2007), Appeal Nos. 06-086 & 06-087-ID1 (A.E.A.B.).

Intervenor 1.³ Included in the intervenor request from Intervenor 1 was a request for personal information to be kept confidential.

[15] The Board received response submissions on the intervenor requests from the Parties between September 10 and 14, 2007.

[16] On October 11, 2007, the Board notified the Parties and the Intervenors that the Intervenors could participate through written submissions only. The Board also denied the confidentiality request of Intervenor 1.4

[17] The Board received written submissions from the Parties on October 1, 2007. In their submissions, the Appellants stated the witnesses they intended to call included the Director, Mr. Ian Franks, Mr. Robert Pender, Ms. Julie MacDougall of the Cypress Hills Interprovincial Park, and Mr. Wes English of Sustainable Resource Development. The Board responded on October 1, 2007, explaining that:

"Mr. Franks and Mr. McGee [the Director] will be appearing as witnesses for Alberta Environment, and Mr. Pender will be giving evidence on behalf of the Elkwater Water Co-operative. It is not permitted for Mr. and Ms. Slemko to call them as witnesses to give evidence on their behalf. Mr. and Ms. Slemko are advised that once Mr. Franks, Mr. McGee and Mr. Pender have completed their direct evidence, Mr. and Ms. Slemko will have an opportunity to cross-examine them. With respect to Mr. English and Ms. MacDougall, please note that it is the responsibility of the parties to inform the people they intend to call as witnesses for the Hearing and to arrange for their attendance at the Hearing."

[18] On October 15, 2007, the Board received an email from Intervenor 1, withdrawing his request to intervene. On this same date, the Board received Dr. Carter's submission and Ms. Schuler provided her submission on October 16, 2007. The Board did not receive a submission from the Elkwater Community Association.

This intervenor made a request to have personal information kept confidential, which the Board did not grant. See: Intervenor Decision: *Slemko* v. *Director, Southern Region, Regional Services, Alberta Environment*, re: *Elkwater Water Co-operative Ltd.* (11 October 2007), Appeal Nos. 06-086 & 06-087-ID2 (A.E.A.B.). As the participation was limited to a written submission only, Intervenor 1 withdrew the request to be an intervenor. Therefore, Intervenor 1 did not provide a submission to the Board and is not included as an intervenor.

See: Intervenor Decision: Slemko v. Director, Southern Region, Regional Services, Alberta Environment,

[19] The Hearing was held in Medicine Hat, Alberta, on October 18, 2007.

II. SUBMISSIONS

A. Appellants

1. Mr. Marshall G. Slemko

- [20] Mr. Slemko submitted that careful management of Alberta's natural lakes is required to sustain lake water levels in order to support a healthy fish population. He argued it is in the best interests of everyone that the existing 70 cm below full supply level cut off be maintained. He stated the 70 cm cut off level effectively mitigates potential environmental concerns associated with low water levels in summer and winter, eliminates conflict between people who need the water and those who enjoy the water view and hillside aspects, preserves the Elkwater Lake bathymetry and shoreline features, and recognizes that the water in Elkwater Lake is not an unlimited resource.
- [21] Mr. Slemko explained Elkwater Lake is located in a heritage park and has defined inflows, diffused surface runoff, and groundwater inputs. He stated that when the water drops below full supply level, it has difficulty recharging back to the full supply level.
- [22] According to Mr. Slemko, the Federal Department of Fish and Wildlife and the Parks and Protected Area Division of Cypress Hills Interprovincial Park recommended a cut off to protect recreational needs and fishery resources. He stated lake levels also have an impact on the boat marina and loading ramps and the public beach.
- [23] Mr. Slemko explained Elkwater Lake is a mesotropic lake, with well oxygenated surface water and anoxic deeper portions. He stated the Northern Pike is an indigenous species to Elkwater Lake, but its population had decreased and the average size is less than 24 inches due to limited food and slow growth.

[24] Mr. Slemko stated there is a lack of detail regarding the water conservation measures in the Licence Holder's by-laws and in memos sent to the Licence Holder's membership. Mr. Slemko argued an increase in the Licence Holder's shares will have a direct impact on the water allotment and water conservation.

[25] Mr. Slemko submitted that the 70 cm below full supply level cut off will protect the aquatic life and ecosystem of the lake, the lake and hillside aspects, and recreational needs. He submitted that the focus should be the long term protection of water sources and looking for ways to use less water.

2. Ms. Linda L. Slemko

[26] Ms. Slemko argued the 70 cm below full supply level should remain as the cut off level for diverting water from Elkwater Lake, and requiring the Licence Holder to contact the Director during drought conditions for a Temporary Diversion Licence should continue. She believed a Temporary Diversion Licence allows for input from other stakeholders and provides a signal to other departments, such as parks and tourism, of the low lake level.

[27] Ms. Slemko stated that when the lake level went to 38 cm below full supply level, people were complaining about the levels and were concerned about safety issues. She argued that if the level is allowed to go more than 38 cm further below full supply level, the number of complaints would increase.

- [28] Ms. Slemko was concerned that no updated studies on Elkwater Lake had been conducted. She argued that because no one knows the right level to prevent any impacts, the level determined should err on the side of caution.
- [29] Ms. Slemko stated "...clarification and understanding of the term 'water conservation measures' is essential." She stated the Licence Holder needs a definition that the entire membership understands and practices.
- [30] Ms. Slemko stated there are many definitions that pertain to water conservation measures, including the following from the Alberta Water Council:

Ms. Slemko's submission, dated September 26, 2007.

- **"1. Water Conservation**: Any beneficial education in water use, loss, or waste.
- **2. Water Management Practices**: All practices that improve the use of water resources to benefit people or the environment.
- **3. Water Efficiency**[: A]ccomplishment of a function, task process, or result with the minimal amount of water feasible.
- **4. Water Productivity**[:] The amount of water that is required to produce a unit of any good, service, or societal value."
- [31] Ms. Slemko referred to a letter dated April 30, 1990, from a fisheries technician for Alberta Forestry, Lands and Wildlife in which the technician suggested no water withdrawals should be made after the lake reaches two feet below full supply level.

B. Licence Holder

- [32] The Licence Holder stated it represents 37 different farm families and a Hutterite colony that need the water at all times. This equated to approximately 250 people and a school that use the water.
- The Licence Holder explained water from Elkwater Lake is used when there is drought or low water levels. The Licence Holder stated it does not have mandatory water conservation measures in place for its membership, except water from the pipeline cannot be pumped into dugouts or into wells. The Licence Holder stated that if the lake levels get close to the cut off level, the membership is phoned or letters sent to ensure water is conserved.
- The Licence Holder explained that prior to the creation of the Elkwater Cooperative and the construction of the pipeline in 1998-99, water from Elkwater Lake for downstream users was released into Ross Creek and those who were able, would capture water from this temporary flow. The Licence Holder emphasized how the pipeline, which delivers water directly to water users without evaporation and seepage losses, conserves water compared with the previous practice of intermittent releases to Ross Creek from Elkwater Lake.
- [35] The Licence Holder explained that if it has to resort to applying for a Temporary Diversion Licence when the lake level goes below 70 cm of full supply level, there may be times when its membership would be without water, because it takes time to process the application. According to the Licence Holder, during the drought conditions of 2001, the rate of evaporation

from the lake was so fast that, by the time a Temporary Diversion Licence was issued, the lake level was below the licenced level and another application for a Temporary Diversion Licence had to be submitted.

[36] The Licence Holder submitted that the Licence Amendment should be accepted as issued.

C. Director

- [37] The Director explained the Licence Holder submitted an application to amend its licence regarding the water level withdrawal restriction clauses following discussions between Alberta Environment and the Licence Holder.
- The Director explained the Licence Amendment was issued for a staged reduction in water withdrawals based on a series of water level cut offs. The Director explained that when the water level is between 35 and 50 cm below the full supply level, the maximum diversion per calendar month is no more than 16,125 m³, and when the level is below 50 cm of the full supply level, the maximum diversion is reduced to not more than 10,500 m³ until the level recovers to 35 cm below full supply level. The previous licence allowed the Licence Holder to withdraw water from Elkwater Lake at its maximum withdrawal rate providing the lake level was no more than 70 cm below full supply level.
- [39] The Director stated that he calculated that if the Licence Holder took its entire annual allocation of 258,000 m³, the potential elevation drop in Elkwater Lake would be 11.8 cm. He explained that a full year of the Licence Holder's diversion at the maximum reduced rate of 10,500 m³ per month would result in a drop of 5.76 cm in the lake level per year or 0.48 cm per month, and the potential lake level loss from the monthly diversion of 16,125 m³ would be 0.74 cm per month or 8.88 cm per year.
- [40] The Director explained the entire volume diverted during the 2001 drought accounted for a 6.38 cm drawdown, and the lowest elevation in the lake during the drought was 103 cm below full supply level.

- The Director explained the Licence Holder is required to operate its water withdrawal system in accordance with the plans set out in the licence. He stated the mechanical parameters of the withdrawal system act as engineering restrictions to the diversion of water. He explained the design and placement of the pumps in the wet wells, from which the water is pumped into the pipeline, sets the ultimate cut off level at approximately 1.5 meters below full supply level. If the lake level drops below this cut off level, the pumps to supply the pipeline would not be operable because the system relies on gravity to supply water from the lake to the wet wells that supply the pumps. The Director also explained that each of the service connections to the Co-operative's users is equipped with 2 gallon per minute restrictor valves.
- The Director stated the amendment requires an earlier awareness and response to low lake water levels. He explained the previous condition allowed the Licence Holder to continue to divert all of its allocation until the 70 cm cut off was reached and then the Licence Holder was completely cut off. The Director stated that this presented a precarious situation for the multi-purpose users served by the Licence Holder.
- [43] The Director explained the amendment allows for a long term solution instead of the high risk and uncertain solution of issuing a possible Temporary Diversion Licence. He stated Temporary Diversion Licences were issued during the drought of 2001-2002 as an emergency relief measure, and the cut off levels used at that time were very similar to those set out in the Licence Amendment.
- [44] The Director explained he issued the Licence Amendment to provide clear and specific rules of what is to be done every time the water level drops, and the members of the Cooperative and the community will be aware of the rules as set out in the Licence Amendment. The Director stated that water management by the Licence Holder can be based on the rules.
- [45] The Director explained a Temporary Diversion Licence does not provide any level of certainty to the Licence Holder or the rest of the community, and he could not guarantee that the Director at the time would or could issue a Temporary Diversion Licence in the future. Therefore, according to the Director, the Licence Amendment ensures certainty for all involved.

[46] The Director stated the cut off numbers were chosen on the basis of a reasonable time for actions to take place. He explained:

"... '35' was chosen, as it is the 'half way' point between 0 and 70 (the old cutoff level). So when the lake levels are half way to the 'old cutoff', the licence holder needs to start taking action. The '50' was chosen as it is roughly the 'half way' point when actions must become more severe as the situation is getting more severe."

[47] The Director explained he was aware other licensing factors existed so that the diversion could not drain the lake, including the allocation limit, the rate of diversion, and monitoring conditions. He stated the Licence Holder is limited to diverting the total quantity of water as allocated in the Licence, and if the Licence Holder wants more water, it must obtain a new licence because the existing Licence cannot be amended to increase the amount of the allocation.

[48] The Director further stated that the rate of diversion can only be modified by a further amendment to the Licence. The Licence also specifies the monitoring conditions, which require monthly monitoring of the lake surface elevation and the quantity of water diverted. The Director stated he was "...aware of his authority under the *Water Act* to make unilateral amendments regarding monitoring and reporting if conditions require it." The Director explained he did not make any changes to the monitoring requirements because the Licence Holder uses a cumulative meter for the quantity of water diverted and it uses the Water Survey of Canada site to measure lake levels.

[49] The Director explained he factored in the biggest impact on the aquatic environment of Elkwater Lake, which are evaporative losses. He stated the water levels dropped as much as 25 cm per month to a total of 103 cm below full supply level during the drought of 2001/2002. According to the Director, at low lake levels, more than 70 cm below full supply level, "...there is no discernable difference in the impact to the aquatic environment between having the Co-op's diversion and not having it."

Director's submission, dated September 27, 2007, at page 5.

Director's submission, dated September 27, 2007, at page 5.

⁸ Director's submission, dated September 27, 2007, at page 6.

- [50] The Director stated Elkwater Lake is located in the South Saskatchewan River Basin and is governed by the South Saskatchewan River Basin Management Plan and the *Bow, Oldman and South Saskatchewan River Basin Water Allocation Order*, which essentially closes these basins to any new water allocations.
- [51] The Director explained the Licence Amendment requires decreased diversion once the water is at certain levels. He explained the concept of water conservation measures was included in the Licence Amendment as a means of how the Licence Holder reduces the amount of its diversion. He stated this concept is part of Alberta Environment's continuing education of the public, water users, and licence holders on the issue and need for water conservation as set out in section 2 of the *Water Act*.
- [52] The Director noted that the *Water Act* does not specify what measures may or may not achieve conservation, only that section 1(j) of the *Water Act* defines conservation as:

"...includes, but is not limited to

- (i) improved efficiency, recycling, reuse or reduction of wastage or losses,
- (ii) preservation, and
- (iii) protection..."
- The Director stated that he did not include a detailed definition of what a conservation measure is and he did not repeat what is already defined in the legislation. He explained he did not want to mandate exactly what the Licence Holder must do to conserve water, because he considered these internal management decisions are best made by the members of the Co-operative. The Director stated the Licence Holder can determine the best measures for its specific fact situation, available technology, financial concerns, and what it values for its water use. The Director argued these decisions should not be made by a statutory decision maker, which is why the Licence Amendment allows the Licence Holder to determine the means to meet the regulated outcome.
- [54] The Director submitted that the Board should recommend that the Licence Amendment be upheld as issued.

D. Intervenors

- 1. Ms. Evelyn Schuler
- [55] Ms. Schuler expressed concern about the shallow appearance of Elkwater Lake and the overgrowth of weeds. She believed this indicated the quality of the water is not good and there is insufficient water to keep the lake healthy.
- [56] Ms. Schuler stated that when the Co-operative was formed, water could not be taken out of the lake when it reached 70 cm below full supply level but it did happen, and now that the cut off level is 50 cm, she would like assurance that the Licence Holder would adhere to the limit.
- [57] Ms. Schuler stated the monitoring data are not forthcoming to the Elkwater Community Association and are unavailable to the cabin owners. She recommended the data should be more accessible.
- [58] Ms. Schuler wanted assurance that water conservation is undertaken for the benefit of Elkwater Lake and everyone that uses it. She argued it would be to the benefit of the Licence Holder to keep the lake as healthy as possible.
- [59] Ms. Schuler stated that making the information available regarding the water quality and quantity would help to keep everyone working together to maintain the health of Elkwater Lake.
- 2. Elkwater Community Association
- [60] The Elkwater Community Association did not file a submission with the Board.
- 3. Dr. David J. Carter
- [61] Dr. Carter stated that, when the Co-operative was first discussed, it was the Elkwater Community Association's understanding that Alberta Environment would be the neutral third party that would monitor and report on the drawdown of water from Elkwater Lake. He stated this assumption was not accurate because the users of the water became responsible for

the monitoring and reporting process, a perceived conflict of interest. Dr. Carter argued Alberta Environment "...should be the sole monitors of data recording and publish public results of such information on a regular basis."

[62] Dr. Carter suggested notice should be given to the Licence Holder and the Elkwater Community Association when the Director projects further drawdowns are required, and he argued it should not be an automatic drawdown.

[63] Dr. Carter questioned whether additional users have been added to the pipeline since the original agreement was in place, and if additional users have been added, whether the original agreement is "null and void." He also asked if the Licence Holder held discussions with any developer regarding adding users to the system.

Dr. Carter argued a transparent reporting system is required to monitor the amount of water taken from the lake and an unbiased assessment of conservation measures used by the members of the Co-operative should be completed. Dr. Carter stated that by allowing the Licence Holder to do its own monitoring and assessments, it becomes the "…'fox guarding the hen house' – this is manifestly unfair to the water co-op and leaves a vast grey area which is open to speculation, criticism and disbelief."¹⁰

[65] Dr. Carter stated that an unbiased and transparent monitoring system should be in place for all users of Elkwater Lake, including those who water cattle and horses directly at the shoreline and the townsite.

At the end of his submission, Dr. Carter stated he "...lives on the south side of the Cypress Hills where the water shed flows towards Medicine Lodge Creek – the Milk, Missouri and Mississippi Rivers into the Gulf of Mexico. I have no vested interest in water usage entering or exiting Elkwater Lake."

Dr. Carter's submission, dated October 15, 2007.

Dr. Carter's submission, dated October 15, 2007.

Dr. Carter's submission, dated October 15, 2007.

III. DISCUSSION

A. Cut Off Level

The Appellants are concerned about the water levels in Elkwater Lake throughout the year. This is a concern shared by the Licence Holder, the Director, and this Board. Water is a valuable resource throughout this province, and particularly in the southern regions where there is limited water available for allocation. In listening to the submissions of the Parties, the Board has no doubt the Appellants, the Licence Holder, and the Director want to protect Elkwater Lake for the various users and for the environment itself.

The Board recognizes the Appellants' use of the lake for recreational purposes, for its aesthetic qualities and for its inherent ecological value as a lake within a unique geographic setting. The Licence Holder uses water from the lake for household and agricultural purposes. The Board appreciates that the Appellants were not advocating that the Licence Holder not be allowed to use the water from the lake for its purposes. What is at issue is when the Licence Holder should no longer be allowed to withdraw water from the lake. Under the original Licence, no water could be withdrawn after water levels dropped lower than 70 cm below full supply level, but until it reached that level, the Licence Holder could continue to withdraw its allocated water at the maximum rate allowed under the Licence.

The Licence Holder explained that even if the Co-operative withdrew its entire licenced water allocation this would have only a slight effect on Elkwater Lake levels. The Appellants have argued that the Co-operative is responsible for the low water level in Elkwater Lake. The Board does not accept this view. The Licence Holder may be responsible for a small reduction in the lake level, but it is primarily evaporation from the lake that is responsible for seasonal low lake levels.

The Appellants are concerned about the lake because they own a cottage near the lake and the lake has aesthetic, recreation, and ecological value to them.

- In 2001, during the severe drought in the area, the Licence Holder was required to apply for a Temporary Diversion Licence because the water level in the lake dropped lower than 70 cm below full supply level. During this process, the Director met with the Licence Holder and with the Elkwater Community Association to reach a resolution that would satisfy the Licence Holder as well as the community. The Board notes that the Director was not required by the specific provision of the *Water Act* to conduct any consultation with the community but he chose to, appreciating the concerns expressed by those in the community regarding the lake. The Board recognizes the merits of the Director's initiative in consulting with those people having a direct interest in the matter and commends him for taking this approach. It was through these consultation efforts that a consensus was reached to allow the Licence Holder to continue withdrawing water but on a graduated basis according to lake level. The levels incorporated into the Licence Amendment were derived from these discussions and the resulting Temporary Diversion Licences.
- The Licence Amendment requires the Licence Holder to be aware of the lake level long before it reaches 70 cm below full supply level and to take additional steps to conserve water at an earlier stage. At 35 cm below full supply level, the Licence Holder now has to reduce the rate of diversion by one quarter (25 percent), and if the lake level continues to decline, at 50 cm below full supply level, the Licence Holder is required to reduce its withdrawal rate to half (50 percent) of the full licensed withdrawal rate. The Licence Amendment does not provide for a complete stoppage of withdrawal at 70 cm below full supply level. That is the provision the Appellants want re-established.
- Elkwater Lake has manmade control structures that maintain lake levels. These have been in place since the 1908 structure was rebuilt in 1979. The nature of the control structures limit the amount of water that can be diverted. The pumping infrastructure is such that it will limit the withdrawal of water if the lake level drops substantially beyond 70 cm below full supply level. The floor of the pump intake wet well is located at 150 cm below full supply level, but the Licence Holder explained water diversion would likely stop when the lake level reaches 130 cm below full supply level because the pumps cannot move the water at full capacity when the water level in the pump wet well becomes that low. Once water drops below that level, it cannot be pumped into the pipeline, thereby effectively preventing further water withdrawals.

- A chart of the long term Elkwater Lake levels back to 1971 was provided in Exhibit 4. This chart showed that annual seasonal fluctuations in lake level of approximately 40 to 60 cm below full supply level were common prior to 1999, which was before the Co-operative pipeline was built. Elkwater Lake levels dropped more than 50 cm below full supply level on seven occasions during the 28 years before the pipeline was commissioned. Elkwater Lake levels dropped more than 50 cm below full supply level once (during the 100 year drought of 2001) in the seven years after the pipeline began operations. There is nothing in the 35 year record of Elkwater Lake levels to support the premise that water withdrawals by the Co-operative have increased the magnitude or the frequency of low water levels in Elkwater Lake. These observations, clearly shown in the evidence, are consistent with the Director's calculations showing a minimal contribution of the Co-operative water withdrawal to the lowering of Elkwater Lake levels.
- In determining the effects on the lake by implementing the 35 and 50 cm levels to reduce water withdrawal, the Director also discussed the possible adverse effects of low lake levels with biologists in the area. All of them, including the Director, acknowledged there would be an effect, but no one could state how the effect would be detectably different at any level lower than 50 cm below full supply level. The Director took this into consideration when making his decision to issue the Licence Amendment, and because there is no definitive data on the specific effects of the lake levels, the Board considers it reasonable that the Director made the decision he did.
- The issue with the original Licence is when the water level in the lake drops below the 70 cm below full supply level. Although this level has not been reached frequently in the recent past, the drought of 2001 caused the lake level to fall lower than 100 cm below full supply capacity. This put the Licence Holder into a precarious position, because without a Temporary Diversion Licence, it would no longer have a water supply once lake levels reached 70 cm below full supply level, leaving homes and livestock without water. Because the Cooperative requires a secure water supply, the Licence Holder applied for an amendment to its Licence. Although the amendments do not guarantee a water supply to the Co-operative, this is an important step towards maintaining a more secure water supply while recognizing the importance of maintaining a healthy lake ecosystem.

- In Ms. Slemko's testimony, she asked the Board to recommend that controls be put in place so that the Licence Holder gets water and the lake is protected. She explicitly did not ask for the Licence Holder to be cut off, however she preferred to require the Licence Holder to apply for a Temporary Diversion Licence when the lake level reached the 70 cm below full supply capacity level. The Board is of the view that the Licence Amendment will achieve that result as best as possible in a challenging circumstance of limited water to meet all valid needs. The staggered withdrawal rates require conservation practices be put in place early, thereby slowing the rate of water withdrawal from the lake.
- Concern was expressed that the Licence Holder was responsible for the monitoring and reporting of the water used. Although it may be ideal to have Alberta Environment conduct the monitoring and reporting, it is also unrealistic considering the number of licences in existence throughout the province. The responsibility rests with the Licence Holder. If the monitoring and reporting is not done as required under the Licence, the Licence Holder is in contravention of the Licence and enforcement action could be taken by the Director. The Director can conduct unannounced checks to ensure the data reported are in line with the actual recordings, and if there is a discrepancy, the Director will follow up and take the necessary steps to ensure compliance with the Licence and the *Water Act*. Even though the Director or Alberta Environment does not conduct the day-to-day monitoring, there are checks and balances in place to ensure the Licence Holder is operating under the terms and conditions of the original Licence and any amendments.
- [78] The Licence Holder is allowed to withdraw a specific amount of water from Elkwater Lake under the original Licence. The Licence Amendment does not change the allotted amount of water that can be used by the Licence Holder. The original Licence was not issued on the basis of the number of users, and therefore, whether or not there are more users of the water is not an issue with respect to the Licence Amendment nor the original Licence, as long as the amount of water drawn out of Elkwater Lake by the Licence Holder does not exceed its annual allocation of 258,000 m³.

[79] In relation to the first issue of the appropriate cut off level to allow the diversion of water from Elkwater Lake, the Board recommends the Licence Amendment be confirmed as issued. The amendments create a balance between the needs of the membership of the Co-operative and those who enjoy the use of the lake and its shore.

B. Water Conservation Measures

- [80] The Appellants argued that "water conservation measures" should be more clearly defined in the Licence Amendment. The Director explained he did not include specific measures to allow the Licence Holder flexibility to be creative in implementing measures that are specific to the Co-operative's circumstances over the life of the Licence.
- The Licence as issued does not have an expiry date. The Board accepts the Director's reasoning for not including specifics into the Licence Amendment as to what the Licence Holder must be doing to conserve water. As the years progress, the members of the Cooperative will gain more experience and knowledge by sharing with other co-operatives and water users as to what can be done to conserve water more effectively. Each area has its own concerns and issues, and allowing the Co-operative to develop its own solution to the issues is reasonable, providing the Licence Amendment, Licence, and the legislation are not contravened.
- [82] The Appellants suggested water meters be installed at each of the withdrawal sites. The Licence Holder explained there are restrictors in place at each site that control the water to a rate of 2 gallons per minute per share. The Board sees the restrictors as an effective method of controlling the flow of water to the various members of the Co-operative.
- [83] It is clear from the evidence presented that the Licence Holder understands what water conservation measures are and how to implement them. As the Licence Holder is using only approximately half of its allocated water, it appears the members are taking appropriate measures to conserve water. Water is a valuable resource, and it is clear to the Board that the members of the Co-operative know this very well, as water is vital to their survival and for their livelihood. If they do not practice conservation measures, it would be to their detriment.
- [84] Although the Board is not recommending that the Licence Amendment be amended to include further specifications on water conservation measures, the Board believes it

would benefit the Licence Holder and its members if an internal document was prepared to explain various conservation measures that could and should be taken when necessary. If a new executive is elected to the Co-operative, or if new shareholders join the Co-operative, it would be a useful document for all concerned. It will also provide the Licence Holder with an opportunity to share ideas with other co-operatives in the area. The Board also understands that regional water plans are being developed, and the Licence Holder will likely be required to incorporate the recommendations of the regional plan.

- [85] During cross-examination, the Appellants were asked if there are water conservation methods that must be practiced by residents of Elkwater and the homeowners of cabins surrounding the lake. The Board was told any conservation measures are voluntary. As the Appellants appear to be active in their community association, it may be worthwhile to bring the matter forward that all residents who live by the lake and in Elkwater implement conservation measures all the time, not just when there are drought conditions. They value Elkwater Lake, and they, too, should be taking the steps to minimize effects on the lake and its ecosystem.
- [86] In relation to the second issue regarding clarification of "water conservation measures," the Board recommends the Licence Amendment be confirmed as issued. The Licence Holder is responsible for ensuring it does not contravene the Licence and Licence Amendment, which includes not taking more water from Elkwater Lake than what is allotted. In order to ensure compliance, members of the Co-operative are aware of the importance of conserving water and appear to be taking the necessary steps for proper water conservation management. Therefore, it is not necessary to specifically define what water conservation measures are.
- [87] The Board notes that the issue of Elkwater Lake levels and the amendment of the Licence for the Co-operative have caused some strain on some relationships in this region. The Co-operative is strongly encouraged to provide the Elkwater Community Association with the results of the Co-operative's monitoring of lake levels as required by the Licence and Licence Amendment on a mutually agreeable basis.

C. Other Matters

[88] The Board commends the Director for developing a reasonable approach to the Licence Amendment which balances the valid interests of the Parties and the need to manage water wisely as required by the *Water Act*. This balance was achieved in a very challenging circumstance.

[89] The Appellants argued that the policy of allowing the Director to reduce the amount of water allowed by a license to be withdrawn from a water source if the full water allocation is not used may work against the goal of conservation. Further, the Board understands that licence holders are advised that when they are not using their full allocation, they are put on notice that their allocation may be reduced. Within the South Saskatchewan River basin, new licences can no longer be granted, except in specific circumstances, but there are licence holders with water allotments that are not being used and may never be used by the license holder. Clearly, with the overall shortage of water available for allocation, there is a need for the Director to review allocations that are not being used. However, it is also possible to see how the process of reminding licence holders that their failure to use their whole allocation may result in a reduction of their allocation appears to be an incentive to use more water to keep an existing allocation. While the Director noted that "waste" is not a valid use, the ability of the Director to evaluate how a licence holder is using water is limited. This circumstance is a concern to the Board, and it will hopefully be addressed as water management plans are developed throughout the province. It is important this limited resource is protected and shared in an equitable manner within the watershed.

[90] During the testimony of the Licence Holder, reference was made to the fact that it was not being represented by an expert. The purpose of the Board is to allow Albertans an opportunity to provide input into decisions made by Alberta Environment. The Board's decision is not based on expert evidence alone, because input from lay persons, who are familiar with the area and the subject under appeal, can be just as valuable. The witness for the Licence Holder explained how he walked the shorelines of Elkwater Lake in 2001 and 2002 to assess whether

there had been a fish kill in the lake as a result of the drought. This was valuable evidence to the Board.

The Appellants explained they wanted additional witnesses to appear before the Board, including Ms. Julie MacDougall of Cypress Hills Interprovincial Park and Mr. Wes English, Fisheries Technician. In the Board's letter of October 1, 2007, the Board explained to the Appellants that they were responsible for contacting their own witnesses; it is not the responsibility of the Board to seek out witnesses for the Parties. In their testimony, the Appellants stated they contacted Ms. MacDougall to attend as a witness on their behalf, but she was unable to attend because she was on vacation. The Appellants did not try to contact Mr. English, author of the April 30, 1990 letter to the Elkwater Lake Water Management Task Force. It is important to note that employees from other government agencies can appear before the Board if required. However, in this case, the Board believes that even if these people were in attendance, the Board's recommendations would not have been any different.

IV. RECOMMENDATIONS

- [92] The Board recommends that Licence Amendment No. 00153082-00-01 be confirmed as issued to the Elkwater Water Co-operative Ltd.
- [93] Further, with respect to sections 100(2) and 103 of the *Environmental Protection* and *Enhancement Act*, R.S.A. 2000, c. E-12, the Board recommends that copies of this Report and Recommendations, and any decision by the Minister, be sent to the following:
 - 1. Mr. Marshall G. Slemko and Ms. Linda L. Slemko;
 - 2. Mr. Robert Pender, President, representing the Elkwater Water Co-operative Ltd.;
 - 3. Ms. Charlene Graham, Alberta Justice, representing the Director, Southern Region, Regional Services, Alberta Environment;
 - 4. Ms. Shirley Rasmussen, representing the Elkwater Community Association;
 - 5. Mr. Len Knowles, representing the Elkwater Community Association;
 - 6. Ms. Evelyn Schuler;
 - 7. Dr. David Carter;
 - 8. Ms. Julie MacDougall, representing the Cypress Hills Interprovincial Park; and

See: Ms. Slemko's submission, dated September 26, 2007, at Tab A.3.

22

9. Mr. Jeff Printz, Prairie Farm Rehabilitation Administration, Medicine Hat District Office.

V. COSTS

The Appellants reserved their right to apply for costs. The Board requests that any application for costs be provided to the Board within two weeks of the date of the Minister's Order with respect to this Report and Recommendations. The Board will then provide the Parties with an opportunity to respond to any such applications before making its decision.

Dated on November 15, 2007, at Edmonton, Alberta.

"original signed by"

Dr. Steve E. Hrudey, FRSC, PEng Chair

"original signed by"

Mr. Ron V. Peiluck Vice-Chair

"original signed by"

Mr. Alex G. MacWilliam Board Member



Office of the Minister MLA, Medicine Hat

Ministerial Order 20/2007

Environmental Protection and Enhancement Act R.S.A. 2000, c. E-12

Water Act R.S.A. 2000, c. W-3

Order Respecting Environmental Appeals Board Appeal Nos. 06-086 and 06-087

I, Rob Renner, Minister of Environment, pursuant to section 100 of the *Environmental Protection and Enhancement Act*, make the order in the attached Appendix, being an Order Respecting Environmental Appeals Board Appeal Nos. 06-086 and 06-087.

Dated at the City of Edmonton, in the Province of Alberta, this 22 day of November, 2007.

"original signed by'
Rob Renner
Minister

Appendix

Order Respecting Environmental Appeals Board Appeal Nos. 06-086 and 06-087

With respect to the decision of the Director, Southern Region, Regional Services, Alberta Environment (the "Director"), to issue Licence Amendment No. 00153082-00-01 (the "Licence Amendment"), under the *Water Act*, R.S.A. 2000, c. W-3, to the Elkwater Water Co-operative Ltd. (the "Licence Holder"), I, Rob Renner, Minister of Environment, order:

1. THAT the decision of the Director to issue the Licence Amendment is confirmed.