



Province of  
British Columbia

# Environmental Appeal Board

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## APPEAL NO. 2005-WAT-027(a)

In the matter of an appeal under section 92 of the *Water Act*, R.S.B.C. 1996, c. 483.

<b>BETWEEN:</b>	Kenneth and Suzan Basso	<b>APPELLANTS</b>
<b>AND:</b>	Regional Water Manager	<b>RESPONDENT</b>
<b>BEFORE:</b>	A Panel of the Environmental Appeal Board Don Cummings, Panel Chair	
<b>DATE:</b>	December 8, 2005	
<b>PLACE:</b>	Kamloops, B.C.	
<b>APPEARING:</b>	For the Appellants: Michael J. Edwards, Counsel For the Respondent: Kevin M. Dickenson	

## APPEAL

This is an appeal of the June 22, 2005 Order of Kevin Dickenson, Regional Water Manager, Southern Service Region, Ministry of Environment, directing the Appellants to remove fill deposited on the foreshore of Red Lake.

The authority for the Environmental Appeal Board to hear this appeal is found in section 93 of the *Environmental Management Act*, and section 92 of the *Water Act* (the "*Act*"). Pursuant to section 92(8) of the *Act* the Board may:

- (a) send the matter back to the comptroller, regional water manager or engineer, with directions,
- (b) confirm, reverse or vary the order being appealed, or
- (c) make any order that the person whose order is appealed could have made and that the board considers appropriate in the circumstances.

The Appellants ask the Board to rescind the issuance of the Order.

## BACKGROUND

Red Lake, a shallow lake with a surface area of approximately 270 acres, is located approximately 50 kilometres northwest of Kamloops, B.C. The Appellants own a 0.47 acre lot (the "Property") fronting the lake. The legal description of the Property is Lot 13, Section 24, Township 22, Range 21, West of the Sixth Meridian Kamloops Division of Yale District, Plan 22483 (the "Plan").

The Property is approximately rectangular in shape with the western boundary fronting 75 feet of the lake and the eastern boundary adjoining a road. On the Plan, a line labelled "original high water mark" defines the western boundary. The depth of the Property between the lake and road is approximately 250 feet. The Property slopes gently down from the road to the lake. The eastern portion of the Property is covered with various species of trees, shrubs, and grasses while the western portion is covered with bullrushes and other aquatic plants.

A dam at the north end of the lake regulates outflow from the lake. An earthen dam constructed before 1928 regulated outflow by allowing overtopping of its crest at an elevation of 98.0 feet (local datum) thereby establishing the Full Storage Level (the "FSL"). In the early 1970's<sup>1</sup>, Ducks Unlimited (Canada) constructed a new dam with a higher crest, but with the elevation of the spillway set to maintain the same FSL.

Licensed storage of water in the lake totals 133.84 acre-feet<sup>2</sup>. Since the early 1950's, only two water licences have been issued – one for 1,000 gallons per day for domestic use and another for 1.34 acre-feet of storage, both in 1979.

In 2003, the Appellants purchased the Property.

In 2004, the Appellants placed a layer of gravel fill on a portion of the Property adjacent to the lake. In 2005, the Appellants placed a second layer of gravel (2½ feet deep) over a portion of the first layer as well as placing riprap along a length of the second layer.

On June 22, 2005 the Respondent, an engineer as defined in the *Act*, issued an Order to the Appellants under section 88(1)(e) of the *Act*. The cover letter that accompanied the Order states that, prior to June 22, 2005, the Respondent "... received numerous complaints regarding works being completed without authority from Land and Water BC<sup>3</sup>."

The Order states in part:

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<sup>1</sup> The Respondent, in his Statement of Points, claims the dam was constructed in 1971/72 but the Report for Change of Works is dated July 7, 1980. A drawing of the proposed dam shows a water level for September 1979. Regardless, the actual date of construction has no bearing on the issue at appeal.

<sup>2</sup> An acre-foot is that volume of water required to cover an acre to a depth of one foot.

<sup>3</sup> Effective June 16, 2005, LWBC became a part of the Ministry of Environment.

Whereas unauthorized changes in and about a stream have been completed on ... [the Property] and,

...

Whereas no licence or approval has been issued under the Water Act authorizing the placement of fill below the high water mark which is an offence under Section 93(2)(i), and Section 93(2)(q) of the Water Act, and,

Whereas I am an Engineer empowered under Section 88 of the Water Act of British Columbia;

Therefore pursuant to Section 88(1)(e) of the Water Act I, Kevin M. Dickenson, P.Eng., hereby order you, Kenneth and Suzan Basso, to remove all of the fill deposited on the foreshore of Red Lake fronting ...[the Property]. All conditions in the attached letter from the Ministry of Environment must be adhered to.

The Respondent stipulated that all items in the Order "must be complied with prior to March 31, 2006."

The Order states that the placement of fill below the high water mark constitutes an offence under section 93(2)(i) and (q), which provide as follows:

### **General offences**

#### **93 ...**

(2) A person who does any of the following commits an offence:

...

(i) constructs, maintains, operates or uses works without authority;

...

(q) makes changes in and about a stream without lawful authority;

...

According to section 1 of the Act, "works" means:

...

(c) obstructions placed in or removed from streams or the banks or beds of streams,

(d) changes in and about a stream,

...

"Changes in and about a stream" is defined in section 1 to include:

(a) any modification to the nature of a stream including the land, vegetation, natural environment or flow of water within a stream, or

- (b) any activity or construction within the stream channel that has or may have an impact on a stream;

"Stream channel" is defined as "the bed of a stream and the banks of a stream, whether above or below the natural boundary and whether usually containing water or not, including all side channels".

Finally, "natural boundary" is given the same meaning in the *Act* as in section 1 of the *Land Act*, which states:

**"natural boundary"** means the visible high water mark of any lake, river, stream or other body of water where the presence and action of the water are so common and usual, and so long continued in all ordinary years, as to mark on the soil of the bed of the body of water a character distinct from that of its banks, in vegetation, as well as in the nature of the soil itself;

On July 20, 2005 the Appellants appealed the Order to the Board. In relation to the Order, their grounds for appeal are as follows:

1. There have been a number of placements similar to that on the Property without complaint.
2. The fill was not placed below the high water mark as the lake level "has artificially risen due to the dam constructed by Ducks Unlimited thereby creating artificial high watermarks due to excessive rainfall during certain times of the year."

## ISSUES

The issue in this appeal is whether the Order was reasonable in the circumstances.

## RELEVANT LEGISLATION

Other sections of the legislation that are relevant to this appeal is as follows:

Section 1 of the *Act* defines the following terms:

**"engineer"** means a professional engineer employed by the government or a government corporation and designated in writing by the comptroller as an engineer and includes a regional water manager;

**"licence"** means a licence issued under this or a former Act;

**"order"** includes a decision or direction, whether given in writing or otherwise;

**"stream"** includes a natural watercourse or source of water supply, whether usually containing water or not, and a lake, river, creek, spring, ravine, swamp and gulch;

**Vesting water in government**

- 2 (1) The property in and the right to the use and flow of all the water at any time in a stream in British Columbia are for all purposes vested in the government, except only in so far as private rights have been established under licences issued or approvals given under this or a former Act.

...

**Changes in and about a stream**

- 9 (1) The comptroller, a regional water manager or an engineer may grant an approval in writing authorizing on the conditions he or she considers advisable
- (a) a person to make changes in and about a stream,

...

**Powers of engineers and officers**

- 88 (1) In addition to all other powers given under this Act and the regulations, an engineer may do one or more of the following:

...

- (e) order the restoration or remediation of any changes in and about a stream;

...

- (l) order a person to remove from a stream any substance or thing that the person has put or permitted to get into the stream;

...

**DISCUSSION AND ANALYSIS**

In deciding the general question of whether the Order was reasonable in the circumstances, the following sub-issues must be decided:

- (a) Where is the boundary between the stream and the private property?
- (b) Does the placement of the fill constitute a "change in and about a stream"?
- (c) Does the fill placement constitute "works"?
- (a) Where is the boundary between the stream and the private property?

The basis for the Order was that the Appellants placed the fill below the high water mark thereby violating section 93. The "high water mark" is important because that defines the boundary between the Property and the stream (i.e., the lake).

The Appellants testified that in 2004, to level the Property, they placed the first layer of gravel on a "grassy area to the bullrushes." They contend that all of the improvements they have made have occurred on dry land – on their Property.

The Appellants referred the Panel to the Plan completed by a British Columbia Land Surveyor in 1971 showing the location of the "original high water mark" that defines the western boundary of the Property. They contend that the Plan which is deposited in the Land Title Office, establishes the legal boundaries of the Property, and can be relied upon for the legal boundaries. The Appellants testified that all the fill placed on the Property is east of, and therefore above, the "original high water mark."

The Appellants claim that water levels were abnormally high in 2005 and reflected flood conditions rather than a high water mark. Mr. Lloyd Fortt, a witness for the Appellants, testified that he had not seen lake levels as high as they were in 2005 for many years, and that local residents had not seen such high water levels in 20 years. Mr. Fortt testified that the first layer of fill placed by the Appellants was covered by lake water to a depth of three to four inches.

The Respondent's position is that the "original high water mark" shown on the Plan is no longer relevant and that the true high water mark is now at some point further east and upland on the Property. In his Statement of Points, the Respondent states

High water marks, especially on lakes, shift over long time periods, especially when a control structure is utilized to increase the storage potential of the lake. In the case of Red Lake, the High Water Mark has moved upland a significant amount.

The Respondent referred the Panel to the plan for an adjacent subdivision in support of this statement. Plan 27536 is of a subdivision adjoining the southern boundary of the subdivision created under the Plan. Plan 27536, surveyed in October 1976, shows a line labelled "High Water Mark: plotted from Original Field Notes". A second line labeled "High Water Mark (1976)" is shown inland, and thus at a higher elevation, from the first (original) high water mark line.

Common to both plans is a road allowance (the "Road") located south of, and with its east/west boundaries nearly parallel to, the Property. The southern boundary of the Road is approximately 340 feet south of the Property. On Plan 27536, a line labelled "H.W. Mark [the Plan]" defines the western boundary of the Road. Approximately 90 feet to the east of this line, on the southern boundary of the Road, an old capped iron post is shown as being "under water at time of Survey."

Plan 27536 shows the location of the high water mark on the southern boundary of the Road being approximately 115 feet east of that shown on the Plan. Thus, two legal surveys, completed five years apart, show a significant discrepancy regarding the location of the high water mark.

The Respondent states that:

[The Plan] references the Original High Water Mark, which would have been established prior to any dam construction, but unfortunately does not make note of the High Water Mark at the time of the survey, conducted near the end of 1971. At that time, the elevation of Red Lake would have been influenced by the dam, resulting in a new

Natural Boundary, as was shown on Subdivision Plan No 27536, based on a survey completed in October 1976.

Neither party presented evidence regarding the date of the "original survey."

Mr. Duane Wells, a Water Management Officer with the Ministry, upon questioning by the Appellants stated that, "vegetation usually constitutes a high water mark." Both parties submitted photographs, some of which show views of adjacent properties where there appears to be a well-defined interface between bullrushes in the lake, and trees and shrubs upland of the lake. The Respondent contends this interface constitutes the natural boundary as defined in the *Act*. Other photographs show the fill placed by the Appellants jutting out abruptly from this interface, which the Respondent claims is not a normal occurrence.

### *The Panel's Findings*

Although the Appellants seek to rely upon the high water mark shown in the Plan, and submit that the lake level has "artificially risen" due to the dam constructed by Ducks Unlimited, this Panel agrees with the findings of a previous panel of the Board in *Gordon and Cynthia James v. Engineer under the Water Act* (99-WAT-10, April 13, 1999) (unreported). In that case, the Board was considering the natural boundary of a freshwater lake. It found that:

Lakes and rivers fluctuate as a result of human and natural factors, often both. It would not make sense to interpret the natural boundary according to historic levels, leaving the Ministry with jurisdiction only over those bodies of water where levels have never changed. (page 4)

This Panel also notes the following statement by the BC Supreme Court in *Westwood Plateau Partnership v. WSP Construction Ltd.*, [1997] B.C.J. No.1294 Vancouver Registry No. C957418 at p.92:

Natural boundaries are not established by survey; they are objects of representation ... Nevertheless, the argument is often raised and consequently has been considered by Courts which have, with a consistency to be expected, ruled that natural boundaries are paramount as monuments and that *the water boundary is ambulatory in nature and not fixed by surveys*. The Survey Acts do not override the common law about natural boundaries.

[emphasis in original]

This Supreme Court decision has been adopted in at least two previous decisions of the Board (see: *Creed v. Deputy Comptroller of Water Rights*, Appeal No. 97-WAT-05, September 28, 1998) (unreported); and *Bernard Wohlleben v. Assistant Regional Water Manager*, Appeal No. 2002-WAT-034(b), May 15, 2003) (unreported)).

Thus, the location of the natural boundary is a question of fact to be determined in each case. As accepted by Sigurdson J. in the *Westwood* case, "the water boundary is ambulatory in nature and not fixed by surveys."

On the facts of this case, the Panel notes that the permitted water storage of 133.84 acre feet may result in water levels rising and falling differently from what would be the norm in an unregulated lake. The Panel appreciates that defining the high water mark on a small, regulated lake without stream flow data, as is the case with Red Lake, can be difficult.

The Panel notes that the 1.34 acre-feet of storage licensed in 1979 is equivalent to a volume of water covering the lake to a depth of 0.06 inches ( $1.34 \text{ acre-feet} \div 270 \text{ acres} = 0.005 \text{ feet}$ , or 0.06 inches) – a depth that is virtually indiscernible. Thus, for over fifty years the volume of permitted storage has remained virtually constant and does not have any significant impact on lake levels.

The Panel also notes that bullrushes are typically a marsh plant found growing in the water at the edges of slow-flowing rivers and lakes. Thus, from the photographs provided by both parties, the Panel deduces that the “natural boundary”, as defined in the *Land Act*, is where the bullrushes end and other vegetation begins. In other words, as stated in the *Land Act* definition, the edge of the bullrushes “mark[s] on the soil of the bed of the body of water a character distinct from that of its banks, in vegetation...”

The Panel finds that the eastern extent of bullrushes defines the “natural boundary” of the Property.

(b) Does the placement of the fill constitute a “change in and about a stream”?

The Panel agrees with the Respondent that one would not expect a natural boundary to be discontinuous. Photographs provided by both parties show an abrupt change in alignment of the “natural boundary” where the Appellants placed fill.

Based on the testimony and photographs provided at the hearing, the Panel finds that some of the fill material was placed on and below this boundary, constituting a change in and about a stream.

In addition, a December 1, 2005 letter from Michael Burwash, M.Sc., RPBio., Senior Ecosystem Biologist with the Environmental Stewardship Division, Ministry of Environment, provides additional evidence of a change in and about a stream as defined in the *Act*. Mr. Burwash attended the Property on August 22, 2005, and describes his observations of the habitat impacts as follows:

The reeded (bullrush) area that was removed on Red Lake would have provided important rearing/foraging habitat for juvenile and adult rainbow trout and brook trout. This littoral zone would have provided cover from predation, a productive area for food, and shade for cooler water temperatures. The area impacted will have reduced production capacity for insects which provides an important food source for both fish and wildlife.

...

The in-filled area will also create a potential sediment source during high water and storm events. There has also been a loss of the root



network stabilizing the shoreline, and loss of woody debris source through the vegetation removal. The shrub vegetation removal has also impacted winter browse vegetation for mule deer in this known winter range area.

Thus, the Panel finds that there has been a change in and about a stream.

The Appellants also argued, in support of their actions, that other people have placed fill below the high water mark of the lake. They provided the Panel with photographs of fill placed on other properties fronting Red Lake that, in their opinion, extends beyond the high water mark. Mr. Wells testified that the government does not have the resources to police contraventions of the *Act*. Instead, it responds to complaints, as was the case with the events leading up to the Order being issued on June 22, 2005.

The Panel finds that the question of "other contraventions" is beyond the purview of this appeal. The Panel's authority regarding this appeal is limited to that set out under section 92(8) of the *Act* – namely to consider the Order under appeal.

(c) Does the fill placement constitute "works"?

The definition of "works" includes "obstructions placed in or removed from streams or the banks or beds of streams" and "changes in and about a stream".

In this case, the discontinuity created by the gravel placement is an obstruction in the stream as well as a change in and about a stream. Thus, the Panel concludes that the fill constitutes works as defined by the *Act*.

*Conclusion - Whether the Order is reasonable in the circumstances.*

Pursuant to section 2 of the *Act*, the property in and the right to the use and flow of all the water at any time in a stream in B.C. is vested in the Crown, with some limited exceptions. Red Lake, to the elevation of the high water mark, meets the definition of a "stream." Therefore, in order to make changes in and about a stream by placing fill below the high water mark, a licence must first be obtained. The Appellants failed to apply for a licence.

The Respondent, under section 9 of the *Act*, can approve a change in and about a stream. By virtue of the Order, it is obvious to the Panel that the Respondent does not believe the placement of the fill should be approved. Without further investigation and plans provided by the Appellants, the Panel agrees.

Further, the Respondent has authority under section 88(1)(e) to "order the restoration or remediation of any changes in and about a stream." The Respondent has chosen to exercise that authority and the Panel finds this to be appropriate in this case.

The Panel acknowledges the Appellants' desire to make what they consider to be desirable changes to the Property. However, the Panel finds that the Respondent has full authority to order removal of the fill and restoration of the foreshore. In the circumstances of this case, the Panel finds that the Order is reasonable.

**DECISION**

In making this decision, the Panel has considered all of the relevant documents and oral evidence, whether or not specifically reiterated herein.

For the reasons set out above, the Panel confirms the Order.

Both parties agreed that if the Order is confirmed, that the date for which all items in the Order must be complied be amended to a date six months past confirmation. The Panel therefore amends the Order to state that it must be complied with "prior to July 31, 2006."

"Don Cummings"

Don Cummings, Panel Chair  
Environmental Appeal Board

December 29, 2005