# ALBERTA ENVIRONMENTAL APPEALS BOARD

## **Report and Recommendations**

Date of Decision – February 27, 2015

**IN THE MATTER OF** sections 91, 92, 94, 95, and 99 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** an appeal filed by Hendrik and Gerritje Krijger with respect to *Water Act* Enforcement Order No. WA-EO-2014/01-RDNSR issued to Hendrik and Gerritje Krijger by the Director, Red Deer - North Saskatchewan Region, Alberta Environment and Sustainable Resource Development.

Cite as: *Krijger v. Director, Red Deer-North Saskatchewan Region, Alberta Environment and Sustainable Resource Development,* (27 February 2015), Appeal No. 13-026-R (A.E.A.B.).

BEFORE:	Mr. Alex MacWilliam, Panel Chair; Mr. Jim Barlishen, Board Member; and Ms. A.J. Fox, Board Member.			
BOARD STAFF:	Mr. Gilbert Van Nes, General Counsel and Settlement Officer; Ms. Valerie Myrmo, Registrar of Appeals; and Ms. Marian Fluker, Associate Counsel.			
SUBMISSIONS BY:				
Appellants:	Mr. Hendrik and Ms. Gerritje Krijger represented, by Mr. Keith Wilson, Wilson Law Group.			
Director:	Mr. Michael Aiton, Regional Compliance Manager, Red Deer-North Saskatchewan Region, Alberta Environment and Sustainable Resource Development, represented by Ms. Vivienne Ball and Ms. Erika Gerlock, Alberta Justice and Solicitor General.			
WITNESSES:				
Appellants:	Mr. Hendrik Krijger, Ms. Gerritje Krijger, and Mr. Steven Shippy.			
Director:	Mr. Michael Aiton, Regional Compliance Manager, Red Deer-North Saskatchewan Region, Alberta Environment and Sustainable Resource Development; Ms. Jaclyn Roulston, Drinking Water Operations Specialist, Alberta Environment and Sustainable Resource Development; Mr. Ron Hanson, Environmental Protection Officer, Alberta Environment and Sustainable Resource Development; and Mr. Terry Chamulak, Regional Hydrologist, Alberta Environment and Sustainable Resource Development.			

#### **EXECUTIVE SUMMARY**

Alberta Environment and Sustainable Resource Development (AESRD) issued an Enforcement Order to Mr. Hendrik and Ms. Gerritje Krijger under the *Water Act* for carrying out activities without an approval. AESRD alleged the Krijgers were draining a lake by deepening an existing trench that was initially constructed in the 1960s and that they dug a second trench to drain a wetland on their property.

The Krijgers appealed the issuance of the Enforcement Order.

The Board held a hearing on January 29, 2015, to hear and consider submissions on the following issues:

- 1. Was the Enforcement Order properly issued?
- 2. Are the conditions in the Enforcement Order reasonable?

The Board recommended the Minister confirm the Director had the jurisdiction to issue the Enforcement Order. The Krijgers carried out an activity as defined in the *Water Act* when soil and vegetation were removed from the existing trench, allowing for a change in the rate and volume of flow of water from the lake. The Krijgers did not have an approval to carry out the activity.

The Board recommended the Minister vary the conditions of the Enforcement Order, because some conditions were excessive.

The Board recommended the Enforcement Order be varied to set the outlet control elevation of the lake at 863.0 metres above sea level as the final level by constructing a flow control structure in the existing trench. Setting this as the final elevation is appropriate to mitigate any impacts that resulted from the Krijgers digging a trench to drain an area that AESRD classified as a wetland.

## TABLE OF CONTENTS

I.	INTRODUCTION				
II.	BACKGROUND				
III.	SUBMISSIONS				
	A.	Appellants	3		
	В.	Director	17		
IV.	WAS TH	IE ORDER PROPERLY ISSUED?	27		
V.	CONDIT	TIONS IN THE ENFORCEMENT ORDER	32		
VI.	GENERA	AL COMMENTS			
VII.	RECOM	MENDATIONS			

#### I. INTRODUCTION

[1] This is the Environmental Appeals Board's report and recommendations in relation to the appeal filed regarding Enforcement Order No. WA-EO-2014/01-RDNSR (the "Order") issued to Mr. Hendrik and Ms. Gerritje Krijger (the "Appellants"). Alberta Environment and Sustainable Resource Development ("AESRD") issued the Order to the Appellants under the *Water Act*, R.S.A. 2000, c. W-3, for carrying out activities without an approval. AESRD alleged the Krijgers were draining a lake by deepening a trench that was constructed in the 1960s ("Trench 1") and that they dug a trench ("Trench 2") to drain a wetland on their property (the "Wetland").

[2] The Board held a hearing to receive submissions on the following issues:

1. Was the Enforcement Order properly issued?

2. Are the conditions in the Enforcement Order reasonable?

[3] Based on the submissions presented, the Board recommends the Minister confirm the Order was properly issued, but the Board recommends the Minister vary the conditions of the Order.

#### II. BACKGROUND

[4] On February 18, 2014, the Director, Red Deer-South Saskatchewan Region, Alberta Environment and Sustainable Resource Development (the "Director"), issued the Order to the Appellants regarding unauthorized works, including an excavated area and trenches, at SE 30-42-24-W4M (the "Site" or "SE 30") near Ponoka, Alberta. The unauthorized works allowed water to drain from a water body and flow to the west onto neighbouring lands.

[5] On February 28, 2014, the Board received a Notice of Appeal from the Appellants appealing the Order.

[6] On March 3, 2014, the Board wrote to the Appellants and Director (collectively, the "Parties") acknowledging receipt of the Notice of Appeal and notifying the Director of the

appeal. The Board asked the Director to provide a copy of the documents upon which his decision was based (the "Record").

[7] On April 4, 2014, the Board notified the Parties that, based on the available dates provided, the mediation meeting would be held on May 9, 2014. On April 11, 2014, the Appellants requested the mediation be re-scheduled. The Board notified the Parties on April 17, 2014, that the mediation meeting would be held on June 13, 2014.

[8] On April 24, 2014, the Board received the Record. A copy was provided to the Appellants on May 5, 2014.

[9] The mediation meeting was held on June 13, 2014, in Edmonton. A further mediation meeting was held on October 10, 2014. The Appeal was not resolved.

[10] On November 18, 2014, the Board notified the Parties that the hearing would be held on January 29, 2015, in Edmonton.

[11] The Board published the Notice of Hearing in the Ponoka News. The Notice of Hearing was also provided to Ponoka County to post on its public bulletin board. A news release was forwarded to the Public Affairs Bureau for distribution to media throughout the Province, and the news release was posted on the Board's website. The Notice of Hearing provided an opportunity for persons who wanted to make a representation before the Board to apply for intervenor status. The Board did not receive any intervenor requests.

[12] On December 18, 2014, the Board notified the Parties the issues for the hearing would be:

- 1. Was the Enforcement Order properly issued?
- 2. Are the conditions in the Enforcement Order reasonable?

[13] On January 19, 2015, the Board received written submissions from the Appellants and Director. The hearing was held on January 29, 2015, in Edmonton.

#### III. Submissions

#### A. Appellants

[14] The Appellants explained they purchased the land that is the subject of this appeal in August 2011. The land contains a lake identified on County of Ponoka maps as Lake No. 21. The Appellants explained that when they purchased the property, they did not know Trench 1 was an unauthorized man-made alteration to the water flow from Lake No. 21. The Appellants noted the Director has alleged that, between 2011 and 2013, the Appellants illegally drained Lake No. 21 as a result of activities the Appellants initiated in and around a ditch that had been constructed in the 1960s (Trench 1) by previous owners of the land and engaged in other illegal activities near Lake No. 21 that also required an approval. The Director alleged the draining of the lake and other work required approvals that the Appellants had not obtained.

[15] The Appellants noted there were two parts to the Order:

- 1. the historical ditching within and adjacent to Lake No. 21 that was done by previous owners over several decades (Trench 1); and
- 2. directions given by the Director relating to earth moving work and landscaping work that the Appellants initiated in the fall of 2013 on the west and south side of the lake and unrelated to Trench 1.

[16] The Appellants said they chose to comply with certain aspects of the Order, primarily those unrelated to Trench 1. They implemented the remedial measures as directed in the Order regarding the earth moving and landscaping on the south side of the lake.

[17] The Appellants stated they immediately complied with the Order in relation to the 2013 landscaping. They explained the remedial work, which included removing fill from a low area and restoring it to an area of higher elevation, was completed to the Director's satisfaction and within the time specified in the Order. The Appellants said they also installed a substantial ditch block at the location and to the design specifications stipulated by the Director as required under clause 2 of the Order.<sup>1</sup> The Appellants stated that, as the remediation of the landscaping is complete, the appeal with respect to clause 2 is largely moot.

Cla

Clause 2 of the Order states:

[18] The Appellants stated their main issue was the Director's attempt to force the Appellants to fill in Trench 1, which AESRD estimated could cost \$175,000.00. AESRD has documented that Trench 1 was initially constructed decades before the Appellants owned the land.

[19] The Appellants stated Trench 1 has existed for a long period of time and has become part of the natural landscape, the local surface water drainage system, and the local water rights allocation system in the community. The Appellants explained water rights have been granted by AESRD under the *Water Act* to the downstream neighbouring farmer, Mr. Faupel, with a priority dating back to 1998. The Appellants stated the source of Mr. Faupel's water rights is Trench 1 which, at the time the water rights were granted, was described as an "unnamed stream." The Appellants said that filling in Trench 1 would deprive Mr. Faupel of his duly licenced water rights and cause flooding of the Appellants' land, interfering with their own property rights and those of their neighbours.

[20] The Appellants stated the "cleanup" work they did in 2011, 2012, and 2013, namely, the removal of trees near Trench 1, fencing, and improvements to a farm crossing, did not change the level of Lake No. 21. They explained the farm crossing has existed since the 1990s, the gas well access road crossing has been in place since 2007, and both crossings have permanent culverts. The Appellants said they did not enlarge or lower the culverts. They

- (a) prior to spring runoff, or March 10, 2014, whichever occurs first, <u>install a</u> <u>temporary control structure such as an erosion resistant ditch block/plug, berm,</u> or other structure consisting of impermeable material (such as clay), to restore the approximate overflow elevation of Lake No. 21;
- (b) this temporary control structure will be constructed as near as practicable to the elevation contour of 863.25 metres <u>at or near the location depicted on Exhibit</u> <u>'B' and labeled as the 'Ditch Block Area';</u>
- (c) prior to spring runoff, or March 10, 2014, whichever occurs first, <u>remove the</u> <u>soil placed in the southern portion of Lake No. 21</u> and return it to the location in the southeast corner of SE 30 where it had previously defined the natural boundary of Lake No. 21;
- (d) provide written notification to the Director at least five days prior to the scheduled implementation of the interim measures so that <u>all activities in and</u> <u>near Lake No. 21 are conducted under the supervision and direction of an Environmental Protection Officer.</u>" (Emphasis in the original.)

<sup>&</sup>quot;The Krijgers shall, by March 10, 2014, implement and maintain the interim measures set out below until such time as the final natural boundary contour elevation of Lake No. 21 under the *Water Act* is established as part of the Remedial Plan (defined below):

explained the culverts act as control structures that limit and regulate the flow of water through Trench 1 determining the water level in the lake. The Appellants maintained they had not drained the lake as alleged by the Director.

[21] The Appellants noted a hydrology review completed by their experts, Tetra Tech EBA Engineering ("Tetra Tech") found AESRD erred in its assessment and overestimated the natural level of the lake by a factor of two. Tetra Tech said that filling in Trench 1 and blocking the outlet at the elevation directed by the Order would cause flooding to the Appellants' lands, other lands to the east, and the acreage owner's land south of the lake. Such activity would also infringe on downstream water rights.

[22] The Appellants argued the Director ignored the exemptions in the *Water* (*Ministerial*) *Regulation*, Alta. Reg. 205/1998, which allowed the Appellants to perform landscaping, maintenance to the fence in Trench 1, and widen the farm crossing without an approval. The Appellants also argued the Director misinterpreted the term "activity" under section 36 of the *Water Act*.<sup>2</sup> The Appellants stated that "activities" under the *Water Act* can only be things done in the present that have a present or future effect of lowering the lake level. The Appellants said nothing they did had the present or future effect of lowering the lake.

[23] The Appellants noted the Director did not acknowledge Mr. Faupel's downstream water rights that were granted in 2002 with a priority date of 1998 for water diversions from Trench 1. The Appellants argued the Director ignored section 95 of the *Water Act* which seeks to prevent interference with water rights as a result of works that obstruct the flow of water.<sup>3</sup>

- 5 -

<sup>&</sup>lt;sup>2</sup> Section 36 of the *Water Act* states:

<sup>&</sup>quot;(1) ... [N]o person may commence or continue an activity except pursuant to an approval unless it is otherwise authorized under this Act....

<sup>(3)</sup> A person who commences or continues an activity

<sup>(</sup>a) that is designated in the regulations as exempt from the requirement for an approval or is part of a class of activities that is designated in the regulations as exempt from the requirement for an approval,... or

<sup>(</sup>c) that is an activity or part of a class of activities that is designated in the regulations as an activity or class of activities that does not require an approval but that must be carried out in accordance with the regulations,

is not required to obtain an approval under this Act."

<sup>&</sup>lt;sup>3</sup> Section 95 of the *Water Act* states:

[24] The Appellants stated the Director failed to use the remedy available to him under section 79 of the *Water Act*, which allows the Director "to declare that a drainage ditch created without an approval is a naturally occurring water body."<sup>4</sup>

[25] The Appellants requested the Board recommend the Order be amended by removing clauses 3 to 8 relating to future work required to remove Trench 1 and declaring clause 2 improper with respect to the requirement of installing a ditch block.<sup>5</sup>

"95 The Director or any person authorized in writing by the Director may, at any reasonable time, enter on any land and remove or otherwise render ineffective

- (a) a works constructed without an approval,
- (b) a works not constructed in accordance with an approval,... or
- (d) a natural or other obstruction, including but not limited to an obstruction formed by soil, debris, ice or vegetation, or beaver dam, if, in the opinion of the Director, the obstruction or dam causes the diversion of water or interferes with the flow of any water,

if, in the opinion of the Director, there is an interference with the rights of a household user, licensee or traditional agriculture user, or with private or public property, as a result of the works, obstruction or dam."

<sup>4</sup> Appellants' submission, dated January 19, 2015, at paragraph 14, quoting section 79 of the *Water Act*. Section 79 of the *Water Act* states:

- "(1) The Director may declare that a drainage ditch, channel realignment or oxbow cutoff that has been created
  - (a) pursuant to an approval under this Act, or
  - (b) without a permit, interim licence, including an updated and reissued interim licence or a supplementary interim licence, licence, approval or other authority under an Act

is a naturally occurring water body for the purposes of this Act.

- (2) If a declaration is made under subsection (1),
  - (a) the approval that authorized the activity or diversion of water that created the drainage ditch, channel realignment or oxbow cutoff expires on the date the declaration comes into effect,
  - (b) the drainage ditch, channel realignment or oxbow cutoff must be treated as a naturally occurring water body for the purposes of this Act, and
  - (c) the approval holder and the owner of the land to which the approval was appurtenant is relieved of all further responsibilities with respect to the drainage ditch, channel realignment or oxbow cutoff."
- Clauses 3 to 8 of the Order, as amended, state:

5

- "3. The Krijgers shall, by December 1, 2014, submit to ESRD a written remedial plan to permanently restore the pre-construction condition and function of the outlet of Lake No. 21, the Wetland, and the southern portion of Lake No. 21 (the "Remedial Plan") that is prepared and signed by a qualified water resource engineer for approval by the Director.
- 4. The Krijgers shall, by December 1, 2014, advise the Director in writing whether, as an alternative to the restoration of the Wetland, they wish to provide wetland mitigation

[26] The Appellants agreed with the facts set out in the preamble of the Order, namely: (1) Trench 1, having existed for decades, tended to drain Lake No. 21 and the dugout within the lake; and (2) the farm crossing and gas well crossing have culverts. The Appellants reiterated the above facts were well established prior to the Appellants owning the land.

[27] The Appellants explained they decided to make some improvements on the SE 30-42-24-W4M in the fall of 2011. They hired contractors to clear some trees from the pasture north and south of Trench 1, to make preliminary improvements to the farm crossing, and to remove old rock piles, old pieces of discarded pipelines, and other debris. The Appellants also cleaned up around the fence crossing on Trench 1.

in accordance with Alberta "Provincial Wetland compensation the Restoration/Compensation Guide" program under the Water Act. 5. The Remedial Plan shall include, but not be limited to: an on the ground survey by an Alberta land surveyor (ALS), as defined in the (a) Land Surveyors Act, to confirm and/or determine the lateral extent of the outlet of Lake No. 21 and the natural water boundary contour elevation of Lake No. 21 under the Water Act, and a survey of the Wetland prior to construction of the Existing Works and the drainage activities that have been conducted; a report from the ALS that proposes the final lateral extent of Lake No. 21 (b) based on a review of the 1917 survey for Lake No. 21, the 1918 township map included in the lane title records for SW 29, the 1894 township plan survey included in the land title records for SE 30, pre-construction aerial photography, and any other investigative techniques that may be required, for review and acceptance by the Director; installation of water monitoring gauges to monitor and track the progress of the (c) restoration and refilling of Lake No. 21; An assessment of the potential for erosion in the area that will be affected by the (d) interim measures, and a description of the erosion control measures to be constructed as party of the remedial work to make the interim measures permanent; 6. The Remedial Plan shall be accompanied by a schedule of implementation for the remedial work that shall have a completion date of no later than March 14, 2015. 7. The Krijgers shall conduct the work described in the Remedial Plan according to the schedule of implementation that is approved by the Director, unless otherwise authorized in writing by the Director. 8. Within 14 days after completion of the remedial work required by this Order, the Krijgers shall submit a final written report (the "Final Report") including as "as built" survey, to the Director that confirms that the remedial work required to comply with this Order has been completed."

[28] The Appellants noted the *Water (Ministerial) Regulation* states that doing work related to fencing in a water body is exempt from requiring an approval.<sup>6</sup>

[29] The Appellants stated the culverts in the farm crossing and the gas well crossing are approximately 0.6 metres in diameter.<sup>7</sup> The Appellants noted the threshold for the requirement of an approval for a water body crossing is the installation of a culvert that is 1.5 metres or more in diameter. The Appellants said they did not change the diameter or elevation of the culvert when upgrading the farm crossing. The Appellants maintained that the flow of water out of Lake No. 21 is the same as it has been for decades.

[30] The Appellants argued the work done at the farm crossing is exempt under section
3(3) of the *Water (Ministerial) Regulation.*<sup>8</sup>

6

- (b) placing, constructing, installing, maintaining, replacing or removing a fence in or adjacent to a water body;
- (c) placing, constructing, installing, maintaining, replacing or removing a crossing in a water body where
  - (i) the water body is not frequented by fish,
  - the hydraulic, hydrologic or hydrogeological characteristics of the water body are not altered at flood events below the one in 25 year flood event,
  - (iii) the size of the culvert used in constructing the crossing, if applicable, is 1.5 metres or less in diameter,
  - (iv) there is no diversion of water from the water body, and
  - (v) the installation of the crossing is not part of a causeway through a lake, slough, wetland or other similar water body;
- (d) landscaping except where
  - (i) it is in or adjacent to a watercourse frequented by fish or in a lake or a wetland, or
  - (ii) it changes the flow or volume of water on an adjacent parcel of land or adversely affects an aquatic environment...."
- <sup>7</sup> See: Section 2 of Schedule 1 of the *Water (Ministerial) Regulation*.
- <sup>8</sup> Section 3(3) of the *Water (Ministerial) Regulation* states:
  - "3(3) The placing, constructing, installing, maintaining, replacing or removing of a watercourse crossing is designated as an activity that does not require an approval, but the activity must be
    - (a) commenced,
    - (b) continued, and
    - (c) carried out

Section 2 of Schedule 1 of the Water (Ministerial) Regulation provides:

<sup>&</sup>quot;2. The following activities are exempt from the requirement for an approval: ...

[31] The Appellants noted AESRD inspectors placed significance on the fact they observed water flowing on November 7, 2011, along Trench 1 and being held back on the east side of the farm crossing culvert, and they implied the flowing water was proof the Appellants were actively draining the lake. The Appellants explained that on the days prior to the AESRD's visit there was increased precipitation and below freezing temperatures, but on November 7, 2011, the temperature was well above zero and the snow melt was starting to flow along the trench.

[32] The Appellants explained their contractor removed many of the trees north and south of Trench 1 in the fall of 2011, but some trees were left along Trench 1. The Appellants said that some of the trees that were left had to be removed in 2014 to comply with the Order. The Appellants stated the bank of Trench 1 was disturbed in a few places when trees close to the bank were removed, causing debris to fall into the trench and make the side slope unstable in places. The Appellants said it is standard practice to use a track hoe to clean the debris and restore the bank when trees are cleared near a ditch. The Appellants reiterated that they did not disturb the culverts in either the farm crossing or the gas well crossing that regulate and control the outflow of the trench and the lake level. The Appellants noted that most of the Director's photographs confirm that most of Trench 1 was undisturbed by anything the Appellants did on Site and that for the most part, the Site remains the same as it did when the Appellants purchased the land in 2011.

[33] The Appellants confirmed they did minor landscaping outside of any water body in the fall of 2011. They explained a minor swale ("Trench 2") was made to help with spring runoff and to make the land in that area easier to farm. The Appellants said Trench 2 is outside any alleged boundary of the Lake No. 21 and is not in any other water body.

[34] The Appellants noted section 2(d) of the *Water (Ministerial) Regulation* exempts landscaping from requiring an approval.<sup>9</sup>

9

in accordance with the *Code of Practice for Watercourse Crossings*, published by the Department and dated December 1, 1999, as amended or replaced from time to time."

Section 2(d) of Schedule 1 of the Water (Ministerial) Regulation states:

<sup>&</sup>quot;2(d) The following activities are exempt from the requirement for an approval... landscaping except where

[35] The Appellants said the Order refers to a non-existent wetland associated with Trench 2. The Appellants noted that, according to the comments made by AESRD, the Wetland:

- 1. did not appear to have had water in it from an aerial photography review;
- 2. is 0.2 to 0.4 acres in size; and
- 3. the water would drain back toward Lake No. 21.

[36] The Appellants stated the swale is unnoticeable today. The Appellants said the Director had to draw the Wetland onto several years of aerial photographs because it does not exist.

[37] The Appellants explained that, in February 2012, they hired a contractor to finish the improvements they made to the farm crossing and level dirt piles that were still in place from the brush clearing and clean up done in November 2011. The Appellants said the improvements to the farm crossing helped make it easier for cattle to cross, but it was still not wide enough to accommodate the larger farm equipment. The Appellants stated they widened the farm crossing to the same width as the gas well crossing, but they did not make the culvert larger in diameter nor lower it. The Appellants said the two crossings continue to act as the control outlet for the trench connected to the lake.

[38] The Appellants stated AESRD returned to the Site unannounced on February 1, 2012. Repeated inspections and entry by AESRD staff onto their land was upsetting to them. The Appellants said the broad entry powers of AESRD were foreign to them since this did not occur in Holland. The Appellants said that, as the number of inspections increased, they became more frustrated, upset, and felt like they were being harassed.

[39] The Appellants noted AESRD concluded on November 7, 2011, that the Appellants constructed the ditching (Trench 1) to drain Lake No. 21 even though there was clear evidence that Trench 1 came into being in the 1960s.

<sup>(</sup>i) it is in or adjacent to a watercourse frequented by fish or in a lake or a wetland, or

<sup>(</sup>ii) it changes the flow or volume of water on an adjacent parcel of land or adversely affects an aquatic environment...."

[40] The Appellants explained they again hired a contractor in November 2013 to level portions of their land south of Lake No. 21. They understood the work they were doing was outside the lake boundaries. The Appellants said the landscaping involved leveling a hill and low area to make it easier to farm, but no work was done in or near Trench 1 or the crossings. The Appellants stated all of the 2013 landscaping work was restored as of March 2014 in accordance with the Order and to the satisfaction of the Director.

[41] The Appellants noted the Director did not commission a professional surveyor to determine the boundary of Lake No. 21 despite acknowledging the importance of doing so.

[42] The Appellants explained that in March 2014, in compliance with the Order, they installed a ditch block in Trench 1 at the location and to the specifications directed by AESRD. The Appellants said they did the work in protest based on their concern that it would cause flooding and that the ditch block was not properly designed by AESRD. They expressed their concerns about the ditch block to the Director and noted the Inspector who provided the specifications for the ditch block design was trained as an agricultural engineer, but he did not have a permit to practice in the area of hydrology or civil engineering.

[43] The Appellants stated that in May 2014, the water from the lake had saturated the ditch block, overtopped and started to erode the ditch block, and within days, water was moving through the ditch block. The Appellants said they contacted the Director as soon as there were signs of the ditch block failing.

[44] The Appellants said the Director accused them of sabotaging the defective ditch block and ordered them to repair the ditch block, which they attempted to do.

[45] The Appellants stated the Inspector entered the Site on May 24, 2014, without any legal authority, and dangerously placed himself at the inlet of the farm crossing in deep water to place a piece of plywood over the inlet to the culvert.

[46] The Appellants said that remnants of the ditch block remain in place as well as the plywood the Inspector placed against the culvert.

[47] The Appellants explained Lake No. 21 was originally surveyed in 1894, and many historical aerial photographs exist for the lake beginning in 1949. The Appellants stated the

photographs confirm the lake was dry many years, and ditching in the lake bottom itself, leading to a dugout, was constructed before 1980. The Appellants said this suggests the lake does naturally dry out.

[48] The Appellants stated the Director proceeded with enforcement action without first having a comprehensive hydrology report prepared. They noted an internal memo prepared by the regional hydrologist and addressed to the Inspector concluded Lake No. 21 would tend to remain full as a permanent water body under natural conditions since inflows exceed evaporation. The Appellants also referenced correspondence between the Inspector on the file and the Project Leader in the surveys and technical services section of AESRD. The Project Leader cautioned the Inspector that relying on the 1917 survey data to set the lake boundary could be difficult, but nonetheless, the Director relied on 1917 data to issue the Order.

[49] The Appellants retained Tetra Tech to review the Record, the basis of the Order, the hydrology of the area, and to assess the work completed by AESRD.<sup>10</sup> Tetra Tech conducted an on-site inspection and interviewed the Appellants and their contractor. Tetra Tech also obtained the same LIDAR (Light Detection and Ranging remote sensing method) and other data sets that were used by AESRD to make calculations about the normal water level for Lake No. 21 and whether or not it would be full if Trench 1 had not been built.

[50] The Appellants noted that Tetra Tech concluded: (1) AESRD made substantial errors about the water balance for Lake No. 21; (2) the lake would not remain naturally full; and (3) AESRD's conclusion that the mean annual inflow exceeds the mean annual evaporation by 83 percent was incorrect by approximately a factor of two.

[51] Tetra Tech explained that AESRD considered all of the runoff from the entire watershed entering into both Lakes No. 20 and 21, but then neglected to subtract from the water balance calculation the amount of water loss due to evaporation from Lake No. 20.<sup>11</sup> This resulted in the incorrect conclusion by AESRD that the lake would be normally full.

<sup>&</sup>lt;sup>10</sup> The Board notes that a representative of Tetra Tech did not attend as a witness at the hearing. Further, the Board notes the Director did not raise any concerns about the absence of a witness from Tetra Tech.

<sup>&</sup>lt;sup>11</sup> Lake No. 20 is located in NE 30-42-24-W4M, on the Appellants' home quarter. Lake No. 20 is not part of the Order.

[52] Tetra Tech noted that AESRD did not take into consideration the current scientific literature and studies on lake level decline on the Canadian prairies, or that the trend of lake level decline as a natural condition of climate cycles has been well documented. Tetra Tech stated AESRD assumed the same conditions that existed in 1897 and 1917 exist today, which is not supported by the science.

[53] Tetra Tech concluded Lakes No. 20 and 21 function as closed depression basins with no surface outflow in most years, and the lake restoration outcome expected by the Director is not achievable.

[54] Tetra Tech stated that a proper water balance analysis based on current science indicates Lake No. 21 would rarely be full even without Trench 1.

[55] The Appellants stated their downstream neighbour, Mr. Faupel, applied for and obtained Traditional Agricultural User water rights (the "Registration") under sections 24 and 74 of the *Water Act*.<sup>12</sup> The Registration was issued in 2002 with a priority date of December 28, 1998, and it describes Trench 1 as the water source as an "Unnamed Stream – Unclassified." The Appellants said this means the director who issued water rights to Mr. Faupel determined that he first started diverting water from the unnamed stream in 1998. The Appellants noted the Registration confirms the same rights as a water licence holder and does not expire.

[56] The Appellants stated the Director did not check to see whether any water rights had been granted relating to Trench 1. The Appellants stated the effect of complying with the

(b) that adjoins a river, stream, lake, natural watercourse or other natural water body, or under which groundwater exists,

Section 74 of the Water Act states:

<sup>&</sup>lt;sup>12</sup> Section 24 of the *Water Act* provides:

<sup>&</sup>quot;(1) A person who owns or occupies land

<sup>(</sup>a) to which a registration is appurtenant, and

has the right to commence and continue the diversion of water from the sources authorized in the registration for the purpose of raising animals or applying pesticides to crops, as part of a farm unit, as authorized by the registration."

<sup>&</sup>quot;(1) Subject to section 34, on receipt of an application for a registration that, in the opinion of the Director, is complete, the Director must register the diversion of water applied for the purpose of raising animals or applying pesticides to crops, as part of a farm unit, unless the Director is of the opinion that the information or proof provided by the applicant is incorrect, in which case the Director may refuse to register the diversion of water.

Order and filling in Trench 1 would be to deprive Mr. Faupel of his water rights and, therefore, would contravene the *Water Act*.

[57] The Appellants said it seemed the Director was unaware of provincial and federal government programs that encouraged and even paid farmers to construct long-term water supply sources on their farms, such as the dugout in the bottom of Lake No. 21. They noted the Alberta Government press release regarding the 1988 Provincial Water Supply Assistance Program did not suggest an approval from AESRD might be required. The Appellants stated that what farmers did on the SE 30 from the 1940s to the 21<sup>st</sup> century were not unlawful activities but were water management improvements that were encouraged and financially sponsored by both levels of government.

[58] The Appellants reiterated the work they did in 2011 and 2012, specifically work done on the fencing, improving the farm crossing, and landscaping, are exempt from requiring an approval, and the brush clearing and landscaping done outside the lake and away from Trench 1 also did not require an approval.

[59] The Appellants stated the Director issued the Order to remove Trench 1 on the faulty assumption that Lake No. 21 is a naturally full lake and the actions of the Appellants undertook in 2011 and 2012 actually drained the lake and changed the lake level. The Appellants argued that AESRD made critical errors of hydrology, did not consider that filling in Trench 1 would deprive water rights holders of their rights (i.e. Mr. Faupel), and seemed to be unaware that federal and provincial governments actively encouraged farmers to improve water management and water storage on their farms.

[60] The Appellants submitted, given the facts in this case and the wording of the exemptions allowed under the legislation, the Director did not have legal authority to order any remedial work regarding the exempt activities.

[61] The Appellants stated the most contentious part of the Order is the requirement to fill in Trench 1 at an expense estimated at \$175,000.00.

<sup>(2)</sup> A registration is effected without an expiry date."

[62] The Appellants noted the Director claims his authority to issue the Order arises from section 36 of the *Water Act*. The Appellants referred to the definition of "activity" as defined in section 1(b) of the *Water Act*.<sup>13</sup> The Appellants argued that, if "activity" includes things done in the past, then section 36 of the *Water Act* applies to things done in the past, but if the definition only applies to things done in the present or things done in the present that will have an effect in the future, then "activity" does not apply to things done in the past and section 36 would not apply to past actions.

[63] The Appellants noted the verbs in the definition of "activity" do not describe actions in the past tense, only in the present or future tense. The Appellants argued that, had the Legislature intended "activity" to include past actions and have retrospective application, it could have included such language, such as "altered" or "changed."

[64] The Appellants stated the only way they could have altered the level of the lake or the flow of water from the lake would have been to change the diameter of the culvert or the elevation of the culvert, which the AESRD Inspector observed regulated the flow and level of the lake. The Appellants said the evidence is clear they did not change the culverts, and because they did not alter or change the flow or level of water, they did not engage in an "activity." The

<sup>13</sup> Section 1(b) of the *Water Act* states: "activity' means

- (A) alters, may alter or may become capable of altering the flow or level of water, whether temporarily or permanently, including but not limited to water in a water body, by any means, including drainage,
- (B) changes, may change or may become capable of changing the location of water or the direction of flow of water, including water in a water body, by drainage or otherwise,
- (C) causes, may cause or may become capable of causing the siltation of water or the erosion of any bed or shore of a water body, or
- (D) causes, may cause or may become capable of causing an effect on the aquatic environment;
- (ii) altering the flow, direction of flow or level of water or changing the location of water for the purposes of removing an ice jam, drainage, flood control, erosion control or channel realignment or for a similar purpose;...

but does not include an activity described in subclause (i) or (ii) that is conducted by a licensee in a works that is owned by the licensee, unless specified in the regulations."

<sup>(</sup>i) placing, constructing, operating, maintaining, removing or disturbing works, maintaining, removing or disturbing ground, vegetation or other material, or carrying out any undertaking, including but not limited to groundwater exploration, in or on any land, water or water body, that

Appellants submitted they did not commence or continue an "activity" and they did not breach section 36 of the *Water Act*.

[65] The Appellants argued that, since they did not engage in an "activity," whether or not what is happening on their land is considered "continuing" is irrelevant.

[66] The Appellants argued the Director had no authority to order the Appellants to remove Trench 1. The Appellants stated they did not commence an "activity" related to Trench 1 or the 1980s dugout, and they have not continued an "activity." The Appellants argued that since their actions do not constitute an "activity" under the *Water Act*, then section 36 of the *Water Act* was not applicable.

[67] The Appellants stated this interpretation supports the presumption in statutory interpretation against non-retroactivity of statutes, and it supports fairness. The Appellants argued it is unfair to impose significant financial burdens on someone who has done nothing wrong or for the wrongs of someone else.

[68] The Appellants distinguished the current situation from the principles in oil and gas law that hold a current licensee liable for environmental issues that might exist and that were caused by a previous licensee. The Appellants stated the government does not warn farmers to conduct a hydrological assessment before they buy farmland, and farmers do not typically hire hydrologists to conduct detailed assessments to determine whether there has been any past alteration of the drainage for which an approval may have been required.

[69] The Appellants argued that interpreting section 36 of the *Water Act* as meaning existing landowners are responsible for drainage activities done by others decades earlier would reduce the value of land, increase transaction costs, and have other undesirable effects.

[70] The Appellants requested the Board recommend the Minister:

- 1. amend the Order by removing clauses 3 through 8 relating to future work requiring the removal of Trench 1; and
- 2. declare clause 2 improper insofar as it required the installation of a ditch block.

[71] The Appellants stated that certain parts of clause 2 of the Order are moot because of the work they completed in March 2014, and the only issue remaining is the matter of costs relating to the installation of the ditch block.

#### B. Director

1. Was the Order Properly Issued?

[72] The Director explained Lake No. 21, which is owned by the Crown, is located, in part, on SE 30-42-24-W4M, and is expressly reserved in the Appellants' Certificate of Title. The Director stated Lake No. 21 is a water body as defined in the *Water Act*, and it is important as: (1) a wetland; (2) a flow regulating mechanism; (3) an area for groundwater recharge; and (4) a filter for farm runoff.

[73] The Director explained Lake No. 21 fills with water from surface runoff in its catchment area (543.5 ha) and from groundwater inflow. Water is subsequently lost when evaporation exceeds precipitation. The outflow is the difference between inflow and change in storage.

[74] The Director explained a water body is permanent if the historic long-term average total loss of water from the water body is positive. When the loss of water is positive, the lake may fill and spill through its outlet. The Director stated the overall mean annual outflow for Lake No. 21 is positive (23.86 dam<sup>3</sup>).

[75] The Director explained a permanent water body is characterized by a well-defined shoreline, and the location of the shoreline is not affected by occasional periods of drought or flooding. He stated the natural boundary follows a consistent contour elevation.

[76] The Director stated that, based on 2013 information, after the ditching activities were undertaken to drain Lake No. 21, the contour elevation of the shoreline was 863.0 metres and, as there is more inflow than outflow in an average year, it will discharge through its outlet.

[77] The Director said that, at least since the 1894 survey, Lake No. 21 has been identified as a permanent water body with a defined bed and shore.

[78] The Director further explained the Wetland is located southwest of Lake No. 21 on the Appellants' property. He stated it is an ephemeral wetland and a Class II wetland according to the Stewart and Kantrud Wetland Classification System. The Director explained a Class II wetland has more productive areas of pasture since the moisture held in the wetland supports the vegetation, but it is less suitable for cultivation because it is more difficult to use equipment and the wetter conditions may not suit some types of crops. The Director noted this type of wetland is important for groundwater recharge.

[79] The Director stated the excavation and filling of the Wetland eliminates its retention and detention functions and would facilitate the flow of surface water, and potentially fertilizers, into Lake No. 21.

[80] The Director noted the Appellants purchased the property in August 2011, and on October 4, 2011, AESRD received a public complaint that someone was draining a water body on the Appellants' property and directing the flow of water to the west, flooding neighbouring lands. In response to the complaint, AESRD inspected the site on November 7, 2011, pursuant to the authority provided under the *Water Act*. During the inspection, AESRD noted:

- 1. Lake No. 21;
- 2. a trench running west from the outlet of Lake No. 21 at the southwest corner (Trench 1);
- 3. two trail crossings along Trench 1 and a culvert installed at each crossing;
- 4. most of the trees along Trench 1 were removed;
- 5. Trench 1 had been recently deepened;
- 6. water was flowing at a high volume and rate away from Lake No. 21 through Trench 1 towards neighbouring lands;
- 7. at the crossing located closest to Lake No. 21, water was flowing at full capacity through the culvert and water was pooled upstream of the culvert; and
- 8. mounds of dirt recently placed adjacent to the dugout (an old excavated area near the outlet within the southwest edge of Lake No. 21).

[81] The Director stated the Appellants explained they enhanced Trench 1 to help direct water in the trench so that it did not settle in the field. The Director said the Appellants were advised of the requirements of the *Water Act* and the *Public Lands Act*, R.S.A. 2000, c. P-40, and that authorization was required for activities, including trenching, within or near a water body such as Lake No. 21.

[82] The Director stated a further inspection was done on February 1, 2012, and the following were noted:

- 1. vegetation along Trench 1 had recently been cleared;
- 2. erosion was visible at the mouth of the culvert closest to Lake No. 21;
- 3. an excavation area near the outlet within the southwest edge of Lake No. 21, the dugout, appeared to be an old disturbance;
- 4. the Wetland located to the southwest of Lake No. 21;
- 5. a trench running from the Wetland towards Lake No. 21 ("Trench 2") that had been constructed after the November 2011 inspection; and
- 6. Trench 2 had been draining water from the Wetland and directing the water to flow towards Lake No. 21.

[83] The Director noted the Appellants were aware that Lake No. 21 was not part of their property as it is owned by the Crown, and they admitted to enhancing Trench 1 in the fall of 2011 by removing soil and cutting trees from the side of the trench.

- [84] According to the Director, the Appellants explained that:
  - 1. Lake No. 21 was a big mess and they wanted to control the water to prevent flooding on their land;
  - 2. they wanted good grasses;
  - 3. they wanted to maximize their cropland; and
  - 4. they were concerned that by plugging Trench 1, Lake No. 21 would back up and flood their land.

[85] The Director noted the Appellants clarified they had not conducted any activity in Lake No. 21.

[86] The Director stated he sent a letter to the Appellants on February 22, 2012, requesting voluntary compliance. The letter:

- 1. summarized AESRD observations and findings from the February 1, 2012 inspection;
- 2. explained the nature of the unauthorized activities relating to Lake No. 21;
- 3. described the ditch block that needed to be installed to render Trench 1 and the steps required to render Trench 2 ineffective and restore Lake No. 21;
- 4. requested the Appellants install the ditch block in Trench 1 and maintain it; and
- 5. advised that grazing and mowing vegetation was not allowed on lands within Lake No. 21 without authorization.

[87] The Director said the Appellants advised they did not want to meet to discuss the

situation and that they did not intend to comply with the requests in the letter.

- [88] The Director explained that historical aerial photographs of the area indicate:
  - 1. Lake No. 21 was in a natural condition in 1949;
  - 2. ditching in Lake No. 21 towards the centre of the lake started in or around 1963;
  - 3. ditching in Lake No. 21 at the outlet and towards the west in the location of Trench 1 began in or around 1963; and
  - 4. the dugout was first evident in or around 1980.

[89] The Director noted AESRD did not receive an application from the Appellants or any other person to conduct activities on the subject lands either before or after the inspections took place.

[90] The Director explained that, in its natural condition, Lake No. 21 has a large area of open water on SE 30 and SW 29, and there is an intermittent overflow outlet at the southwest edge where water spills once Lake No. 21 is filled to the spill elevation. The outlet is not a defined trench or channel.

[91] The Director acknowledged that, at the time the Appellants purchased the lands, there were works on the property that had not been authorized under the *Water Act*, *Public Lands Act*, or any predecessor legislation.

[92] The Director stated he was most concerned with the drainage of Lake No. 21.

[93] The Director said that when it became evident the Appellants would not voluntarily comply with the requirements in the February 22, 2012 letter, the file moved to an investigative phase. The Director noted an AESRD Investigator notified the Appellants on February 15, 2013, by letter, that an investigation into unauthorized activities on SE 30 would take place that could result in an enforcement action against them. The Director stated that, on October 7, 2013, in a telephone conversation with AESRD, the Appellants indicated they did not wish to meet to discuss remedial works related to the draining of Lake No. 21.

[94] The Director explained that AESRD received a further complaint on September 19, 2013, from the owner of an acreage property at the southeast corner of SE 30-42-24-W4M about the draining of Lake No. 21. The complainant stated equipment had been digging a drainage ditch near the southern portion of Lake No. 21. The Director said a public complaint was also received on November 27, 2013, alleging earthmoving activities draining Lake No. 21 were continuing on SE 30-42-24-W4M.

[95] The Director stated that an inspection on November 29, 2013, indicated soil from a hill located along the southeast edge of Lake No. 21 had been removed and deposited in the southern portion of the lake. The backhoe operator was requested to stop work because he was in contravention of the *Water Act*. The Director said the backhoe operator explained his objective was to drain water from the southern portion of Lake No. 21 and the southeastern portion of SE 30 so the resulting dry land could be cultivated. According to the Director, the intention was to drain the water to the east property boundary between SE 30 and SW 29 where it would flow to Lake No. 21 then west out Trench 1.

[96] The Director explained that, prior to issuing an enforcement order his practice is to provide an opportunity for a discussion on the factual circumstances and compliance issues. The Director said a meeting held on December 16, 2013, had no resolution and a final attempt to meet with the Appellants on February 18, 2014, did not proceed because there was no response from the Appellants.

[97] The Director explained the Order was issued on February 18, 2014, and amendments were made on July 11, 2014, and October 10, 2014, to extend the deadlines for the

Appellants to provide a remedial plan and to advise the Director if the Appellants wanted to provide wetland compensation instead of restoration of the Wetland.

[98] The Director submitted the Order was properly issued.

[99] The Director stated that, as a matter of law and policy under the *Water Act*, persons are prohibited from draining water bodies such as the Wetland and Lake No. 21, and from altering the flow, direction of flow, level of water, or changing the location of water by any means.

[100] The Director said that before any person intends to continue or commence any activity prescribed by the *Water Act*, they must apply for and receive approval from AESRD.

[101] The Director stated that even if the Appellants had provided an application to AESRD to maintain or deepen Trench 1, the Director would not have issued an approval because Trench 1 drains Lake No. 21.

[102] The Director said that persons who are not in compliance with the *Water Act* are required to come into compliance through voluntary means or by way of an enforcement order.

[103] The Director explained that Lake No. 21 is important as a wetland and flow regulating mechanism for protecting downstream lands from flooding. He said the restoration of the storage capacity of the lake is necessary to re-establish the retention and detention function.

[104] The Director explained an enforcement order is a remedial tool that is issued to compel persons to remedy contraventions of the *Water Act* and come into compliance. The Director said he has the authority to issue an enforcement order to any person he believes has contravened the *Water Act*.<sup>14</sup> The Director noted the definition of "activity" and "works" as stated in the *Water Act*.<sup>15</sup> The Director submitted that "works" includes man-made drainage of a water body.

<sup>&</sup>lt;sup>14</sup> Section 135(1) of the *Water Act* states:

<sup>&</sup>quot;The Director may issue an enforcement order to any person if, in the Director's opinion, that person has contravened this Act, whether or not that person has been charged or convicted in respect of the contravention."

<sup>&</sup>lt;sup>15</sup> Section 1(1)(mmm) of the *Water Act* defines "works" as follows:

[105] The Director stated the Wetland and Lake No. 21 are water bodies as defined in the *Water Act*. He explained a review of historical photographs of the area showed that, over time, the flow and direction of flow of water on SE 30 has been altered and the level of water in Lake No. 21 has been lowered by the activities of the Appellants and one or more of the former owners of SE 30.

[106] The Director noted the man-made drainage works:

- 1. continues to alter the flow and direction of flow of water on SE 30 and from SE 30 to the west;
- 2. has changed the location of water that would otherwise remain on SE 30 and SE 29; and
- 3. altered the level of water in Lake No. 21 and the Wetland.

[107] The Director argued that, even though the Appellants did not construct the original works, they continue to operate and maintain them, without authorization, thereby draining Lake No. 21. The Director stated operation and maintenance of the works is an activity as defined in the *Water Act*.

[108] The Director stated the Appellants have commenced and continued activities as defined in the *Water Act*, such as removing or disturbing ground, vegetation, and other material at Trench 1, Trench 2, and the southern portion of Lake No. 21 for the purpose of drainage.

[109] The Director explained that remedial work is required in order to restore Lake No.21 to its natural condition.

[110] The Director explained the outlet spill elevation of a lake determines the capacity of the water body. He said Lake No. 21 is a permanent water body since it has a well-defined shoreline and it fills and spills from year to year over time. The Director stated it is important to restore the outlet to its original spill elevation in order to restore the natural environment surrounding the lake.

(ii) mitigative measures associated with it...."

<sup>&</sup>quot;works' means any structure, device or contrivance made by persons, or part of it, including a dam and canal, and

<sup>(</sup>i) land associated with it, and

[111] The Director explained AESRD tried to work with the Appellants to explain the law relating to water in Alberta, their activities at SE 30, and the need for remedial work to come into compliance. The Director said the objective of the remedial work is to restore the Wetland (or pay compensation in lieu) and Lake No. 21 to their natural condition.

[112] The Director determined that, as a result of the:

- existence, operation, and maintenance of the works;
- deepening and widening of Trench 1;
- construction of Trench 2; and
- removal of soil from a hill along the southeast edge of Lake No. 21 and the placement of soil in the southern portion of Lake No. 21 and in the Wetland,

all or a portion of Lake No. 21 has drained, thereby causing or potentially causing an effect on the aquatic environment at SE 29, SE 30, and neighbouring lands to the west of SE 30. The Director said that altering the location and level of water in Lake No. 21 might result in flooding to lands that are down gradient.

[113] In response to the Appellants' argument that "activity" only applies to the present or future impacts, and not retrospectively, the Director argued it was not reasonable that someone who has contravened the section 36 of the *Water Act* would not be liable due to the passage of time or because they sold the property.

[114] The Director argued the Appellants contravened section 36(1) of the *Water Act* by continuing to conduct activities that would not have been authorized under the *Water Act*, and the Order was properly issued.

### 2. Conditions in the Order

[115] As to the conditions in the Order, the Director argued the conditions are reasonable. The Director stated that, under section 136(1) of the *Water Act*, he has broad authority to order one or more terms described in the section in an enforcement order.<sup>16</sup>

16

Section 136(1) of the *Water Act* provides:

<sup>&</sup>quot;In an enforcement order, the Director may order any or all of the following: ...

[116] The Director stated he has the authority to order the stopping or shutting down of any activity, diversion of water, or operation of a works either permanently or for a specified period of time. The Director argued that, because the Appellants failed to follow AESRD directions, it was reasonable for him to order the Appellants to stop all activities contributing to the drainage of Lake No. 21 and the Wetland.

[117] The Director stated that, in order to ensure no further drainage of Lake No. 21 and the Wetland took place prior to spring runoff and during the preparation of the remedial plan, it was reasonable for him to order interim measures, such as the temporary control structure like a ditch block to restore the spill elevation of Lake No. 21.

(c)	if no approval, preliminary certificate or licence has been issued and no registration has been effected, the stopping or shutting down of any activity, diversion of water, or operation of a works or thing either permanently or for a specified period of time;				
(d)	the ceasing of construction, operation, maintenance, repair, control, replacement or removal of any works or the carrying out of an undertaking until the Director is satisfied that the construction, operation, maintenance, repair, control, replacement or removal or the carrying out of the undertaking will be done in accordance with this Act;				
(e)	the submission to the Director, for the Director's approval, of a proposal or plan to be undertaken by the person in order to remedy the contravention;				
(f)	the removal or otherwise rendering ineffective of				
	(i)	a works placed or constructed without approval,			
	(ii)	a works that is no longer required or for which an approval or licence has been cancelled or is no longer in effect, or			
	(iii)	an obstruction to the flow of water caused in any manner;			
(h)	(h) the minimization or remedying of an adverse effect on				
	(i)	the aquatic environment,			
	(ii)	the environment, caused by a problem water well or drilling, or			
	(iii)	human health, property or public safety;			
(k)	how the order is to be carried out;				
(1)	the reporting on any matter that the order requires to be carried out;				
(m)	the maintenance of records on any relevant matter;				
(n)	the reporting periodically to the Director;				
(0)	the specification of the time within which any measure required by the order is to be commenced and the time within which the order or any portion of the order is to be complied with;				
(r)	the taking of any other measure that the Director considers necessary to facilitate compliance with the order or this Act."				

[118] The Director stated he prescribed the spill elevation at which to install the temporary ditch block using the 1894 and 1917 survey notes describing Lake No. 21, information in land titles records, and recent aerial photographs.

[119] The Director explained AESRD prepared a LIDAR contour data overlay to assist in determining a conservative estimate of the natural spill elevation, which was determined to be about 863.5 metres above sea level ("ASL"). Using these data, historical aerial photographs, and site inspections, the Director estimated a spill elevation of at least 863.25 metres ASL was required to represent natural conditions.

[120] The Director argued it was reasonable for him to order the soil placed in the southern portion of Lake No. 21 be removed and returned to where it was originally removed from by the Appellants in order to ensure the filling of Lake No. 21 during spring runoff was not impeded.

[121] The Director stated he has the authority to order:

- 1. the person to whom an enforcement order is issued to submit to the Director, for his approval, a proposal or plan to be undertaken to remedy the contravention;
- 2. the person to whom an enforcement order is issued to remove or otherwise render ineffective a works placed or constructed without approval;
- 3. the person to whom an enforcement order is issued to restore or reclaim the area affected to a condition satisfactory to the Director; and
- 4. how the order is to be carried out.

[122] The Director explained it is his practice to require persons who are subject to an enforcement order to submit to the Director how they propose to remedy the contravention in the form of a written remedial plan prepared by a qualified expert. The Director noted the items he expected to be included in the remedial plan, including:

- 1. a ground survey to identify the natural spill elevation of Lake No. 21 and the natural spill elevation of the outlet;
- 2. a report on the natural spill elevation of Lake No. 21 based on available historic information and any other investigative technique proposed by the Appellants;
- 3. installation of gauges to monitor the progress of the restoration and filling in of Lake No. 21; and

4. an assessment of the potential for erosion during the implementation of the interim measures and restoration of Lake No. 21, and the proposed erosion measures if needed.

[123] The Director stated the natural spill elevation of Lake No. 21 is necessary to determine the dimensions of a permanent ditch block. The Director said he provided the results of AESRD's interpretation of the historical information about the natural spill elevation to the Appellants.

[124] The Director stated it was reasonable for him to provide the Appellants with the choice of restoring the Wetland or providing wetland compensation in lieu.

[125] The Director stated it was reasonable for him to require the Appellants report to the Director when the remedial work is complete. This information would allow the Director to assess whether the Appellants complied with the Order and to assess the restoration of Lake No. 21 and the Wetland.

#### IV. WAS THE ORDER PROPERLY ISSUED?

[126] Under section 99 of the *Environmental Protection and Enhancement Act*, R.S.A. 2000, c. E-12 ("EPEA"), the Board must prepare a report and provide recommendations to the Minister to confirm, reverse, or vary the Director's decision to issue the Order.

[127] The first issue the Board had to consider was whether the Order was properly issued. According to the Director, the Order was issued because the Appellants contravened section 36 of the *Water Act* by conducting an activity without an approval.

[128] An "activity" is defined in section 1(b) of the *Water Act*. For the purpose of this case, in order to be classified as an "activity," three basic criteria must be met: (1) an action must take place that involves placing, constructing, operating, maintaining, removing or disturbing works, removing or disturbing ground, vegetation, or other material; (2) it must occur in or on land, water, or water body; and (3) it must alter or be capable of altering the flow or level of

water or it must change or be capable of changing the location of water.<sup>17</sup> For the Order to be properly issued, it must be shown all three of these elements have been met.

[129] In this case, work took place in Trench 1 and on land adjacent to Trench 1. Trench 1 is the outflow from Lake No. 21 heading in a westerly direction. Any changes to Trench 1 will have an impact on the outflow of water from the lake, whether in volume, rate, or timing. The threshold for finding that an action is an "activity" is very low.

[130] The primary issue debated in this appeal was whether the Appellants undertook work that resulted in, or may result in, changes to the flow or location of water flowing from Lake No. 21.

[131] The Board reviewed the Record, the written submissions, and the oral evidence provided by the Parties. Based on this review, the Board determined the evidence was sufficient to demonstrate the work done by the Appellants constituted an "activity" as defined in the *Water Act*. The Board notes that it would have been helpful if the Director obtained more quantitative evidence to support his decision that the work done by the Appellants actually altered the flow or location of water. For example, the Director could have taken close-up photographs of the alleged disturbance and soil piles, sampled or otherwise provided a more in-depth analysis of the soil piles, made measurements of the flow rates, or made a more detailed assessment of the Wetland. More detailed information would have assisted the Director in determining the best

<sup>&</sup>lt;sup>17</sup> Section 1(b) of the *Water Act* states: "activity' means

<sup>(</sup>i) placing, constructing, operating, maintaining, removing or disturbing works, maintaining, removing or disturbing ground, vegetation or other material, or carrying out any undertaking, including but not limited to groundwater exploration, in or on any land, water or water body, that

<sup>(</sup>A) alters, may alter or may become capable of altering the flow or level of water, whether temporarily or permanently, including but not limited to water in a water body, by any means, including drainage,

<sup>(</sup>B) changes, may change or may become capable of changing the location of water or the direction of flow of water, including water in a water body, by drainage or otherwise,

<sup>(</sup>C) causes, may cause or may become capable of causing the siltation of water or the erosion of any bed or shore of a water body, or

<sup>(</sup>D) causes, may cause or may become capable of causing an effect on the aquatic environment...."

approach to take to deal with the activity, and would have assisted the Appellants in understanding the Director's concerns and his approach dealing with the issues. Additional information of the type described above would also have greatly assisted the Board once the matter proceeded to an appeal and a hearing.

[132] The Appellants argued the work that was done to the farm crossing and the fence and the removal of trees along Trench 1 fell within the exemptions under the *Water (Ministerial) Regulation.* According to the Appellants, rocks, roots, tree branches, and other debris fell into Trench 1 when the trees were removed close to the edge of Trench 1. However, from the 2003 to 2010 aerial photographs and satellite imagery it is clear that trees grew only along a portion of Trench 1. In these areas the root removal would cause debris to fall into the trench and, with its removal, vegetation and soil from the side of Trench 1 would also have been removed. However, observations regarding the removal of vegetation and soil were not limited to these areas.

[133] The aerial photographs and satellite imagery taken before the Appellants cleared the trees in 2011 indicate there were no trees present between the farm crossing and east to the dugout at the outlet of Lake No. 21. Slides presented during the Director's evidence at the hearing clearly show two large piles immediately adjacent to Trench 1, both on the south side, between the farm crossing and Lake No. 21. One slide shows a pile of uprooted trees on the west side of the farm crossing on the south side of Trench 1. This slide also shows the south bank of Trench 1 in this area to be devoid of vegetation and the earth has been disturbed on both sides of Trench 1. The Appellants described the piles as mainly rocks and other debris cleaned up from the land. The location of these piles would not seem to be indicative of the piling of rocks randomly gathered along with "debris." AESRD described the piles as dirt, testified they were dirt, and the slide shows only dirt. Although two lengths of old gas line near the base of one of the piles can be seen, no rocks are visible in the photograph. AESRD staff also indicated the fan-like deposition of dirt in front of the piles are indicative of the bucket of a track hoe opening as dirt is delivered to the pile.

[134] The evidence indicates soil had been removed from Trench 1 and the slope on one side of the trench was altered. The removal of soils from the trench was an "activity"

commenced by the Appellants. The change in depth and width of Trench 1 altered or, at the very least, was capable of altering the volume and rate by which water flowed from Lake No. 21. This is, by definition, an "activity" under the *Water Act* for which an approval was required.

[135] The Appellants stated they had not altered the size or elevation of the culverts in the farm crossing or the gas well crossing and that these culverts were the controls for the elevation of water in Lake No. 21. A photograph taken on November 7, 2011, shows water covering the top of the culvert on the upstream end of the farm crossing and flowing about half full on the downstream end. Although there are no elevation readings for Trench 1, this observation indicates the control of the water elevation in the lake was further upstream and not at the culverts because the water was exiting the lake faster than the culvert could pass it.

[136] The Board notes the Appellants attributed the unseasonably high flow in Trench 1 on November 7, 2011, to snowmelt from warm temperatures and precipitation. The flow in Trench 1 with a ripple profile indicates fairly fast flowing water. The original complaint regarding downstream flooding came on October 4, 2011. For Trench 1 to have significant flows more than one month later raises questions regarding these unseasonably high flows. AESRD described the runoff as not being indicative of snowmelt but rather flow from a water body. The temperatures reported were unseasonably warm in the October 22 to November 4, 2011 period, but the graph provided by the Appellants in their submission indicates there was no accumulated precipitation prior to November 3 when 1.6 cm of snow fell. Based on the photographs and the data, the Board finds it reasonable to conclude the flow in Trench 1 cannot be attributed solely to the melting of 1.6 cm of snow.

[137] The size of Trench 1 was altered when soil was removed. The pictures provided in the Record and in the submissions clearly show the vegetation was removed from one side of Trench 1, and it is fair to assume that soil was also removed with the vegetation.

[138] Changing the dimensions of Trench 1 impacted or at least had the capability of impacting the rate of flow and, therefore, volume of the water. It appears the water from Lake No. 21 flowed at a greater velocity as a result of the Appellants' actions, thereby altering the flow of water and falling within the definition of an "activity" in section 1(b) of the *Water Act*.

[139] The definition of "activity" does not require intent to conduct the activity, only that the activity has taken place. There is no minimum amount of disturbance that is required to meet the definition. The Director's discretion in determining if an action is an activity as defined needs to be reasonable and fair in the circumstances.

[140] Trench 2 was dug to drain water from an area the Director classified as a wetland close to the acreage on the south boundary of SE 30-42-24-W4M towards Lake No. 21. The Director stated the difference in vegetation from the surrounding areas is a clear indication of the existence of a wetland. The Appellants affected the flow of water to Lake No. 21 by digging a shallow trench, referred to as a "swale" by the Appellants, to promote the movement of water from the Wetland to the lake. Again, this falls within the definition of an "activity" in that it is altering or is capable of altering the rate of flow and location of the water.

[141] The Director stated that, had AESRD not received a complaint from the public, AESRD would not have been made aware of Trench 1. The Board understands the complaint related to work being done in Lake No. 21 and Trench 1 and not the existence of Trench 1.

[142] The Director stated he issued the Order because the Appellants were continuing to conduct an activity and would not agree to undertake voluntary remediation. By continuing, the Director explained that in his view, the mere existence of Trench 1 on the Appellants' land was an unapproved activity that entitled him to issue an enforcement order. However, the Board does not have to assess whether an activity is continuing because, in this case, the Appellants commenced an activity, whether it was intentional or not. That was sufficient for the Director to investigate the activity and determine if an Order was warranted.

[143] The actions of the Appellants, in removing soil from Trench 1 and constructing Trench 2, constitute activities as defined in the *Water Act*. After discussions with the Appellants failed to achieve voluntary compliance, it was within the Director's discretion and legal authority to issue the Order.

[144] Therefore, in response to the first question, the Board recommends the Minister confirm the Order was properly issued, because the Appellants commenced an activity that altered or was capable of altering the rate of flow of water or the location of water.

#### V. CONDITIONS IN THE ENFORCEMENT ORDER

[145] The second issue the Board heard was whether the conditions in the Order were reasonable.

[146] The Order requires the Appellants to undertake remedial action on three sites on the SE 30-42-24-W4M: (1) the area where a hill was removed and soil was placed in the south portion of Lake No. 21; (2) Trench 1; and (3) the area described as the Wetland to the southwest of Lake No. 21 and Trench 2.

[147] The Parties agreed the conditions in the Order relating to the remediation of soil removal from a hill and placement of the soil in the south portion of the lake have been satisfied. The Appellants removed the soil they placed in the lake and re-contoured the hill in 2014. As that work has been completed to the satisfaction of the Director, this portion of the Order is moot and will not be considered by the Board.

[148] The Board has some concerns with what the Director expected the Appellants to do to comply with the Order with respect to Trench 1 and the Wetland.

[149] Aerial photographs in the Record show that Lake No. 21 had little or no water in it after the mid-1960s. The lake was surveyed in 1917 by W.H. Norrish, Dominion Land Surveyor, who, in his notes, indicated the lake was six feet (1.8 m) deep and designated it a Class 5 water body, meaning a lake with permanent shorelines. He also indicated it had no defined outlet. Aerial photographs taken in 1949 and 1963 show a large water body existed at Lake No. 21. The fact that, after the mid-1960s, which coincided with the construction of Trench 1 and a ditch to the centre of the lake, the lake was dry or had very little water indicates these works significantly impacted the lake. The lake essentially took on the characteristics of an ephemeral slough. This is further confirmed by the fact that even though Lake No. 21 has greater inflow than Lake No. 20, located immediately upstream, all the post 1960s aerial photographs show Lake No. 20 as a fully identifiable water body whereas Lake No. 21 is dry or nearly dry. Regardless of the impacts of Trench 1, Lake No. 21 is still, by definition, considered a permanent water body under section 1(1)(ggg) of the *Water Act*.<sup>18</sup>

[150] Requiring the Appellants to undertake a number of "temporary" measures does not appear to be a reasonable approach in this case. Water has been flowing from Lake No. 21 through Trench 1 since the 1960s.

[151] What the Director has asked in the Order is for the Appellants to follow two consecutive courses of action regarding the remediation of Lake No. 21: (1) undertake construction of a temporary control structure (i.e. ditch block) with a spill elevation of 863.25 m ASL, which was AESRD's conservative estimate based upon LIDAR contour data, historical aerial photographs, and visual inspections; and (2) prepare a remedial plan which would include (i) a ground survey conducted by an Alberta Land Surveyor to establish the natural lake boundary elevation, (ii) preparation of a report by the surveyor to propose a final lake spill elevation, and (iii) an implementation schedule for remediation. The Board believes the conditions in the Order should have been either to: (1) select a conservative spill elevation, then finalize it once the lake recovered to the 863.25 m elevation and, based upon visual observations, to fine tune the appropriate elevation; or (2) have the surveys completed and then ask for an engineering design to achieve the recommended final spill elevation. The Order should not have required both courses of action. The Order should have required either interim elevation selection and the establishment of the final elevation by trial and error or the establishment of the final elevation and a design to meet that elevation. Since the "ditch block" was installed in 2014, the lake has seemingly almost totally recovered, as evidenced by aerial drone photography provided by the Appellants. This was due to a large runoff in the spring of 2014. Consequently, the Board believes no further lake surveys are required to establish a final spill elevation for the lake. The Director's interest was to re-establish Lake No. 21 as a functioning lake. This has been achieved by placing the ditch block in Trench 1.

18

Water body is defined under section 1(1)(ggg) of the *Water Act* as:

<sup>&</sup>quot;...any location where water flows or is present, whether or not the flow or the presence of water is continuous, intermittent or occurs only during a flood, and includes but is not limited to wetlands and aquifers...."

[152] The Director had selected a spill elevation of 863.25 m as a conservative spill elevation for construction of the ditch block. AESRD's initial work suggested that 863.5 m had been the spill elevation under natural conditions. Subsequent analyses indicated that 863.0 m +/-0.3 m was the likely natural spill elevation. In making a determination of what the natural spill elevation would likely have been, the Board considered all the information on the Record as well as additional information provided at the hearing. Based on the Certificate of Title, the Appellants own 108.97 acres in SE 30. The Director provided information on the stage-surface area relationship for Lake No. 21 in SE 30.<sup>19</sup> At an elevation of 863.25 m, the lake would cover 55.69 acres of land in SE 30. The total area of SE 30-42-24-W4M, without road allowances, is 158.95 acres, and with the 10.03 acres subdivided from the quarter section, the remaining area of the Appellants' land and the lake totals 148.92 acres. When the lake area is subtracted from the total area, the result is 93.23 acres (148.92 - 55.69 = 93.23), which is 16.74 acres less than the Appellants' title. However, if the stage-surface area relationship is extrapolated down to elevation 863.0 m, the lake surface area in SE 30 would be 49.59 acres, and the area available for the Appellants would be 99.33 acres, somewhat closer to the 108.97 acres on the Appellants' title. The Board is in agreement with AESRD's later estimate that 863.0 m is a closer estimate of the historic spill elevation of Lake No. 21 under natural conditions.

[153] The Appellants' consultant, Tetra Tech, stated AESRD's conclusion that "...the mean annual inflow exceeds the mean annual evaporation by 83%" was incorrect by approximately a factor of two. They went on to observe that "...the lakes will function as closed depression basins with no outflow." This observation appears contrary to the photographic evidence of the flows exiting Lake No. 21 on November 7, 2011. Furthermore, even if the exceedance of 83 percent was out by a factor of two, the annual inflow would exceed evaporation by 41.5 percent by their calculations, which would still indicate that on average Lake No. 21 would fill and spill annually. Nevertheless, AESRD refined its water balance calculations which indicated drainage basin inflow exceeded evaporation by 33.4 percent (23.68 cubic decametres annually) confirming that, on average, Lake No. 21 will be a sustained water body and will spill.

<sup>19</sup> 

See: Director's submission, dated January 19, 2015, at paragraph 145.

[154] The Order requires the current landowners, the Appellants, to restore Lake No. 21. Trench 1 has been existence since the 1960s. During that time, ecosystems have been reestablished with Trench 1 as the normal outflow from Lake No. 21. Trees were established along the banks and vegetation was growing on the banks of Trench 1. The flow of water was directed to the west, and the neighbouring property relied on this established flow of water for its agricultural needs. The neighbour, Mr. Faupel, applied for and received a Registration for water from an "unnamed stream" in 2002 (with a priority date of 1998), which is the extension of Trench 1 and Lake No. 21.

[155] Placing a permanent ditch block in Trench 1 may impact the water rights of Mr. Faupel. Weather conditions and the elevation in Lake No. 21 at any one time will be the major influences. Based upon average conditions, Lake No. 21 is expected to spill 23.86 cubic decametres annually. Based on photographs provided in the Appellants' submission, it appears Mr. Faupel likely has a dugout in the watercourse so he has some storage capability. His Registration allows him to divert 0.535 cubic decametres of water annually. Consequently, there should be no negative impacts to Mr. Faupel's Registration with the restoration of Lake No. 21 provided the spill will continue to flow westward along Trench 1.

[156] With respect to the Wetland, the Board found that the Wetland was drained by Trench 2. The Director provided the Appellants with the option of restoring the Wetland or providing compensation in lieu. Compensation allows for the restoration of a previously drained wetland in the same watershed as the impacted wetland or in a watershed close by. Compensation can also require the person to pay into a fund established for wetland restoration work.<sup>20</sup>

[157] The Board is concerned the Appellants constructed Trench 2 less than three months after being visited by AESRD staff regarding the "enhancement" of Trench 1, when staff reportedly informed them of the approvals required for drainage works. The Appellants attested to having knowledge of approval requirements related to wetlands. However, upon questioning, the Appellants stated they considered a wetland to be a water body having one to two feet of

<sup>&</sup>lt;sup>20</sup> See: Director' submission, dated January 19, 2015, Tab 2: Alberta Environment, Provincial Wetland Restoration/Compensation Fact Sheet, November 2005.

standing water. This might explain their characterization of the Wetland associated with Trench 2 as being an "alleged wetland."

[158] To mitigate for wetland losses that resulted from the construction of Trench 2, the Board is of the opinion that by selecting a spill elevation of 863.0 m for Lake No. 21, the Appellants will be contributing as much as 9.64 acres of their titled property to wetlands when the lake is full. In view of this, the Board believes the refilling of Trench 2 should not be required, affording the Appellants additional arable land in the Trench 2 area to offset their contributions to the wetlands along the margin of Lake No. 21 when it is full. Therefore, the Board recommends the spill elevation for Lake No. 21 be established at 863.0 m, and this provides sufficient mitigation with respect to the Wetland.

[159] In order to ensure the spill elevation in Lake No. 21 remains at 863.0 m, the control structure currently installed in Trench 1 (the ditch block) must be modified to spill water at this elevation without erosion occurring. The Record showed erosion starting as the water flow overtopped the ditch block, and showed the extent of the erosion that occurred after the water receded below elevation 863.25 one day later. The photograph shows the control elevation at the ditch block was lowered by at least 0.5 m.<sup>21</sup>

[160] The Board recommends the Order be varied, to require the Appellants to modify the ditch block structure in Trench 1 to allow water passage without erosion, which would include the integration of a proper spillway. The structure must be based on a design and drawings that have been approved, in writing, by the Director.

[161] To monitor water levels in Lake No. 21, the Board recommends that one measuring gauge that is approved by the Director be properly anchored and placed in a location approved by the Director, preferably in a location where it can be read without requiring access across the Appellants' land, such as along the undeveloped road allowance between SE 30-42-24-W4M and SW 29-42-24-W4M. The Board also recommends a steel surveyor's pin (i.e. benchmark) be installed on the control structure with the head set at elevation 863.25 m ASL.

21

See: Director's Record, at Tab 8 for photographs.

This elevation would be at the top of the ditch block with the spill way being at the elevation of 863.0 m.

[162] The Director needs to be cognizant of the costs associated with conditions placed in an enforcement order. In this case he asked the Appellants to restore a decades old trench and restore, or provide compensation in lieu of, a Wetland at an estimated cost of \$175,000.00. The cost of the temporary ditch block was estimated by the Appellants at between \$15,000.00 and \$20,000.00 to date. Requiring them to undertake extensive studies, implement interim measures, obtain the Director's approval over an extended period of time for proposed remedial actions, which may or may not be deemed to be satisfactory at any time, and submit various plans would be very time consuming, expensive, and emotionally draining. The Board is of the view that in situations such as this, AESRD should have initially undertaken an assessment to establish the natural spill elevation of Lake No. 21, provided it to the Appellants, required the ditch block be engineered to pass the outflow safely, and approved the plans and construction. This would have expedited restoration of Lake No. 21 to a condition similar to its present day condition. Dealing with the restoration of the Wetland, the Director wanted to offer the possibility of compensation in lieu as an alternative to the Appellants, so the Order could not be directive. The Board believes that, if the Appellants did not want to make a choice, the Director should have specified the requirements. Again, this would have expedited a resolution of the situation.

[163] The Director testified that he had the ability to name others in the Order, including previous landowners. The Director said he reviewed the land title records prior to issuing the Order. The Board is of the view that this information and the aerial photographs showing Trench 1 was constructed in the 1960s, should have allowed the Director to identify the landowner who conducted the initial activity of building Trench 1. The Director did not explain why he did not include others in the Order. Had the Order included these other parties, it might not have placed the burden of restoring Trench 1 solely on the Appellants that required them to remedy an activity that primarily occurred over 50 years ago. The Board questions the viability of this approach by the Director.

[164] The Appellants pointed out that the Director has the authority "to declare a drainage ditch created without an approval is a naturally occurring water body." The Director

responded that he would never declare an unapproved ditch that was draining a lake as a "naturally occurring water body" because of the gravity of its implications.

[165] Based on the above, the Board recommends the Order be varied to set the elevation of Lake No. 21 at 863.0 m ASL.

[166] As the Board recommends the spill elevation of Lake No. 21 be 863.0 m ASL at the ditch block, the Board recommends the Order be varied to remove the requirements of conducting a ground survey to determine the natural water boundary contour elevation of Lake No. 21. The Board is also recommending all conditions relating to restoring the pre-construction condition and function of the outlet from Lake No. 21 be removed from the Order and replaced with the requirement that the flow control structure constructed in Trench 1 be modified to provide a spill elevation of 863.0 m, and to safely pass spill from the lake without erosion of the structure.

[167] The Board recommends the conditions requiring the Appellants to restore the Wetland or provide compensation in lieu be deleted from the Order in recognition of the reasons provided for selecting the spill elevation of 863.0 m ASL.

#### VI. GENERAL COMMENTS

[168] The Appellants explained they were not aware Trench 1 was an unauthorized man-made work until the Director advised them of this situation.

[169] The Director argued the Appellants are continuing an unauthorized activity by merely maintaining the existence of Trench 1. Given the circumstances of this case, the Board does not have to make a decision on whether the legislation supports the Director's argument that the existence of works that alter or are capable of altering the flow or location of water holds the current landowner liable for activities of past landowners.

[170] If such an approach is to be applied across the province, this could have serious implications for many landowners and future purchasers of land. It is not a normal practice for purchasers of land to investigate if there are any water-related works on a property and, if there are any, to determine if they are all approved works. There is no convenient database to

determine if the works are authorized unless AESRD is contacted to assess the works and provide a response on whether the works had needed or received regulatory authorization. Given that, in the past, the provincial and federal governments provided funding to landowners to undertake drainage works, the approach suggested by the Director could impact an indeterminate number of properties in the province.

[171] It is also a concern to the Board that there was no prior notice to landowners that this type of liability exists. In the oil and gas industry, it is known that a purchaser of a lease also purchases the liabilities of previous owners of the lease. This is the result of extensive public policy discussions prior to the implementation of EPEA and significant public and industry education after the passage of EPEA. Such work seems to be conspicuously absent with respect to these provisions in the *Water Act*. In response to questions from the Board, the Director could not point to any policy work or education program that AESRD undertook to make the public aware of this issue. There are no sections in the *Water Act* that clearly indicate a landowner is responsible for previous landowners' activities. If this is the interpretation that is in effect, AESRD should take steps to inform the public, particularly landowners, of this policy.

### VII. RECOMMENDATIONS

[172] For the foregoing reasons and pursuant to section 99 of the *Environmental Protection and Enhancement Act*, the Board recommends the Minister confirm the Director's decision to issue Enforcement Order No. WA-EO-2014/01-RDNSR, but vary the conditions in the Order. The Board recommends the Order be varied to require the Appellants to modify the flow control structure in Trench 1 to maintain the spill elevation of Lake No. 21 at 863.0 m and to ensure the spill from the lake passes without erosion of the structure. The proposed design for the control structure must receive written approval from the Director prior to construction. The Board recommends the date for which the proposed design be submitted to the Director be July 31, 2015. A monitoring gauge, approved by the Director, must be appropriately placed in Lake No. 21. Further, one surveyor's steel pin (i.e. permanent benchmark) in the control structure is also recommended.

[173] The Board also recommends the following conditions in the Order be deleted:

- 1. conditions requiring the Appellants to conduct surveys to determine the natural water boundary contour elevation of Lake No. 21;
- 2. conditions requiring the Appellants to permanently restore the outlet of Lake No. 21 to pre-construction condition; and
- 3. conditions requiring the Appellants to restore the Wetland or provide compensation in lieu.

[174] With respect to sections 100(2) and 103 of EPEA, the Board recommends that copies of this Report and Recommendations, and of any decision by the Minister, be sent to the following:

- 1. Mr. Keith Wilson, Wilson Law Office, on behalf of Ms. Gerritje and Mr. Hendrik Krijger; and
- 2. Ms. Vivienne Ball, Alberta Justice and Solicitor General, on behalf of the Director, Red Deer-North Saskatchewan Region, Alberta Environment and Sustainable Resource Development.

[175] The Appellants reserved their right to submit a final costs application. The Board requests that an application for costs be provided to the Board within two weeks of the date the Board distributes the Minister's Order with respect to this Report and Recommendations. The Board will then provide the Parties with information regarding the submission process should a costs application be made.

Dated on February 27, 2015, at Edmonton, Alberta.

- original signed -

Alex MacWilliam Panel Chair

- original signed -

Jim Barlishen Board Member

- original signed -

A.J. Fox Board Member







ALBERTA ENVIRONMENT AND PARKS

> *Office of the Minister MLA, Lethbridge West*

# Ministerial Order 31/2015

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 No. 13-026

I, Shannon Phillips, Minister of Environment and Parks, 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 No. 13-026.

Dated at the City of Edmonton, in the Province of Alberta, this 26<sup>th</sup> day of August, 2015.

- original signed by -

Shannon Phillips Minister

## Appendix

## Order Respecting Environmental Appeals Board Appeal No. 13-026

With respect to the decision of the Director, Red Deer-North Saskatchewan Region, Alberta Environment and Sustainable Resource Development,\* to issue Enforcement Order No. WA-EO-2014/01-RDNSR (the Enforcement Order) under the *Water Act*, R.S.A. 2000, c. W-3, to Mr. Hendrik Krijger and Ms. Gerritje Krijger, I, Shannon Phillips, Minister of Environment and Parks, order that the Enforcement Order be varied as follows:

- 1. On page 2 of the Enforcement Order, in the third paragraph, replace the phrase "On February 1, 2012, the Inspector" with the phrase "WHEREAS on February 1, 2012, the Inspector".
- 2. On page 3 of the Enforcement Order, in the fifth paragraph, replace the phrase
  - "a) the outlet of Lake No. 21 to the condition and function as it was before the construction of manmade drainage
  - b) the bed and shore of Lake No. 21 to its location as it was before the construction of manmade drainage, and the placing of soil in the southern portion of Lake No.21
  - c) the Wetland to the condition and function as it was before the construction of manmade drainage;"

with the phrase

- "a) the outlet of Lake No. 21,
- b) the bed and shore of Lake No. 21 and the placing of soil in the southern portion of Lake No. 21, and
- c) the Wetland;".
- 3. On page 4 of the Enforcement Order, in paragraph "1." delete the phrase ": (a) directing the flow and direction of flow of water from SE 30 to the west and onto neighbouring lands (b)".
- 4. On page 4 of the Enforcement Order, delete paragraph "2." in its entirely, and replace it with the following:

"2. DELETED.".

<sup>\*</sup> At the time the decision of the Director was made, the Department was Alberta Environment and Sustainable Resource Development.

- 5. On page 4 of the Enforcement Order, delete paragraph "3." in its entirety, and replace it with the following:
  - "3. The Krijgers shall, by September 30, 2015, submit to the Director a written remedial plan (the "Remedial Plan") for approval by the Director. The Remedial Plan shall be prepared to the satisfaction of the Director.".
- 6. On page 4 of the Enforcement Order, delete paragraph "4." in its entirely, and replace it with the following:
  - "4. DELETED.".
- 7. Starting on page 4 and continuing on page 5 of the Enforcement Order, delete subparagraph "5. (a)" in its entirety, and replace it with the following:
  - "(a) the installation of a permanent control structure, such as an erosion resistant ditch block or other structure approved by the Director in writing, consisting of impermeable material (such as clay) to set the overflow elevation of Lake No. 21 to 863.0 meters and to allow water above this elevation to pass through a proper spillway to the west in Trench 1;".
- 8. On page 5 of the Enforcement Order, delete subparagraph "5. (b)" in its entirety, and replace it with the following:
  - "(b) the installation of the permanent control structure at or near the location depicted on Exhibit "B" and labelled as the "Ditchblock Area";".
- 9. On page 5 of the Enforcement Order, in subparagraph "5. (c)" delete the phrase "Installation of water monitoring gauges" and replace it with the phrase "the installation of a water monitoring gauge".
- 10. On page 5 of the Enforcement Order, in subparagraph "5. (c)" delete the phrase "of Lake No. 21;" and replace it with the phrase "of Lake No. 21, with the gauge being placed in a location that allows it be read without requiring entry onto the Krijgers' land;".
- 11. On page 5 of the Enforcement Order, in subparagraph "5. (d)" delete the phrase "An assessment of the potential for erosion in the area that will be affected by the interim measures, and".
- 12. On page 5 of the Enforcement Order, in subparagraph "5. (d)" delete the phrase "to make the interim measures permanent;" and replace it with the phrase "; and".
- 13. On page 5 of the Enforcement Order, immediately following subparagraph "5. (d)" add the following:

- "(e) the installation of a steel surveyor's pin (as a benchmark) on the control structure with the pin set at the top of control structure, which shall be at 863.25 meters unless otherwise authorized by the Director in writing."
- 14. On page 5 of the Enforcement Order, in paragraph "6." delete the phrase "March 14, 2015" and replace it with "November 15, 2015, unless otherwise authorized in writing by the Director".
- 15. On page 5 of the Enforcement Order, in paragraph "8." delete the phrase "survey" with the phrase "drawing".
- 16. On page 5 of the Enforcement Order, in paragraph "8." delete the phrase "has been completed." with the phrase "has been completed. The final report shall be prepared to the satisfaction of the Director.".
- 17. Amendment No. 1 to the Enforcement Order, dated July 11, 2014, is repealed in its entirety.
- 18. Amendment No. 1 to the Enforcement Order, dated October 10, 2014, is repealed in its entirety.