

WATER ACT

BEING CHAPTER W-3 R.S.A. 2000 (the "Act")

ENFORCEMENT ORDER NO. WA-EO-37959

John Beck
231105 Range Rd 284
Rockyview, Alberta T2P 2G6

(hereinafter referred to as "Beck")

WHEREAS **John Beck** is the registered owner of lands legally described as NE 19-36-6 W5M located in Clearwater County, in the Province of Alberta (the "Lands");

WHEREAS on May 5, 2021, a member of the public reported to Alberta Environment and Protected Areas ("EPA") that Beck was moving gravel in the Clearwater River;

WHEREAS on May 6, 2021, EPA Environmental Protection Officers (EPOs) conducted an inspection on the Lands and confirmed the following:

- Concrete "Lego Blocks" and large rocks had been placed along the bank of the Clearwater River (See Appendix A Figure 2) adjacent to the Lands,
- Two locations where the bank had been cut into in order to provide access to the bed and shore of the Clearwater River (See Appendix A Figure 1),
- Approximately 5 concrete "Lego Blocks" were visible on the bottom of the Clearwater River in the area adjacent to the Lands.

(hereinafter, collectively referred to as the "Unauthorized Activities")

WHEREAS on May 11, 2021, the EPO conducted a search of EPA databases and found no approvals for the Unauthorized Activities had been issued under the *Water Act* nor the *Public Lands Act*;

WHEREAS on September 6, 2022, a desktop review report was submitted to an EPA Investigator by EPA's River Engineering and Technical Services Section that concluded:

- Generally, armoring placed at a riverbank can disturb and alter the natural flow of a river. This disturbance can create local erosion (scour) near the toe of a structure, and may still not be effective for the intended purpose;
- Proper engineering design and construction minimizes these negative effects while still providing the desired level of protection. Heavy rock riprap armoring is typically keyed-in to the bank to prevent outflanking by the river, and employs an apron at the toe to fill potential scour holes that would otherwise undermine the structure;
- Other details such as side slope, material gradation, use of geotextile or filter fabric, selection of appropriate rock type, and use of bioengineering ensure the structure is sustainable and minimize negative impacts to the aquatic environment.
- Based on the supplied photos [of the Lands and adjacent areas of the Clearwater River], none of these necessary features exists at the site;

- The armoring was likely installed without proper design;
- The concrete blocks were placed without any side slope or toe apron;
- It is unlikely that the concrete blocks and limestone rocks, as placed, will enhance bank stability;

WHEREAS on September 20, 2022, a report was submitted to the EPA Investigator by a Fisheries Biologist with EPA, confirming that the area where the Unauthorized Activities occurred is part of critical Bull Trout habitat (a "Threatened" species in Alberta) and other aquatic species, and likely had a negative impact on all fish species present;

WHEREAS on October 28, 2022, an EPO and EPA River Engineering and Technical Services Section conducted a further site visit of the Lands and the EPO made the following observations:

- additional rock and concrete blocks placed in and on the bank of the Clearwater River compared to the May 6, 2021 inspection, and
- additional concrete blocks were observed within the active channel of the Clearwater River;
(see Appendix A, Figures 1 and 2)
(collectively, all of the installed concrete blocks, rocks, and construction at the site are hereinafter referred to as the "Unauthorized Works")

WHEREAS on December 20, 2022, the EPA River Engineering and Technical Services Branch submitted a second report to the EPO regarding the October 28, 2022 inspection. This report concluded that.

- The Unauthorized Works installed by Beck, are focused on localized erosion adjacent to the Lands rather than erosion susceptibility of the entire site outside of the Unauthorized Works. While the Unauthorized Works provide some limited short-term protection, they may accelerate erosion elsewhere along the banks of the River.
- The Unauthorized Works are not expected to function appropriately over the long term, leading to continued concrete block instability and river erosion at this location.
- The disturbance from the Unauthorized Works has the potential to create local erosion (scour), increased turbidity, and subsequent downstream siltation. As concrete blocks tip over, a rapid release of silt, causing increased turbidity would be expected.
- The natural regime of the River, including potential channel migration zone was altered by the installation of the Unauthorized Works. The River can be expected to move over time within the channel migration zone, including the Beck Property.

WHEREAS the Clearwater River is a water body as defined in Section 1(1)(ggg) of the *Water Act*,

WHEREAS each of the Unauthorized Activities is an "activity" as defined in Section 1(1)(b) of the *Water Act*;

WHEREAS Section 36(1) of the *Water Act* states that "no person may commence or continue an activity except pursuant to an approval unless it is otherwise authorized under this Act";

WHEREAS EPA has not issued an approval under the *Water Act* to Beck or any other person authorizing any of the Unauthorized Activities or for the Unauthorized Works, and they are not otherwise authorized under the *Water Act*,

WHEREAS Beck is a person responsible for the Unauthorized Activities pursuant to section 1(1)(kk) of the Act and Section 1(5) of the Water (Ministerial) Regulation (AR 205/1998);

WHEREAS Todd Urquhart, Compliance Manager, Regulatory Assurance, Southern Region, has been appointed a Director for the purpose of issuing enforcement orders under the *Water Act* (the "Director");

WHEREAS the Director is of the opinion that Beck has contravened Section 36(1) of the *Water Act*, which is an offence pursuant to Section 142(1)(h) of the Act, by conducting the Unauthorized Activities without an approval;

THEREFORE, I, Todd Urquhart, Director, pursuant to Section 135(1) and 136(1) of the Water Act, HEREBY ORDER THAT:

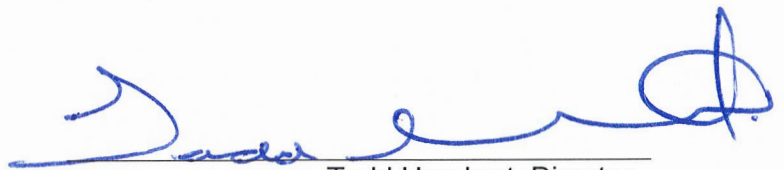
- 1) Beck shall immediately cease carrying out any further Unauthorized Activities on the bed and shore of the Clearwater River adjacent to the Lands.
- 2) Beck shall retain a Professional Engineer, specializing in water resources and/or river engineering.
- 3) Beck shall, on or before **July 31, 2023**, submit to the Director in writing the following information:
 - (1) the name and contact information of the Professional Engineer, and
 - (2) a summary of how the Professional Engineer meets all the requirements of Clause 2 of this Order.
- 4) Beck shall, on or before **October 31, 2023**, submit to the Director for the Director's written approval, a written Remedial Plan (the "Remedial Plan") authenticated by the Professional Engineer, which shall have at its objective, **ONE** of the **THREE** following options:
 - Option #1: Removal**
Removal of the Unauthorized Works and restoration of the impacted areas of the bed and shore back to their pre-disturbance condition;
 - Option #2: Abandonment**
Abandonment of the Unauthorized Works in place, with installation of additional protections that provide silt and erosion stabilization; or
 - Option #3: Reconstruction**
Reconstruction or modification of the Unauthorized Works at the site to bring them to an engineered state that would be acceptable to the Director;
- 5) The Remedial Plan for all **THREE** options shall include at minimum, each of the following:
 - a) Assess the impacts of concrete "Lego" blocks in the active channel of the river, as to the expected fisheries, erosion and siltation impacts to the River;
 - b) Remediation of the riverbank where access points were created as identified in Appendix A Figure 1 back to their pre-disturbance condition;
 - c) A detailed description of the measures to prevent all erosion, siltation, and other adverse effects to the Clearwater River during all of the work carried out in the implementation of the Remedial Plan;

- d) A complete list of types of:
 - (a) Equipment,
 - (b) Methods and materials that will be used in the implementation of the Remedial Plan;

For Options #2 and #3, the following additional information is required in the Remedial Plan;

- e) An assessment for potential channel migration (erosion and deposition) in the area that may be affected by the proposed remedial work;
 - f) An assessment of the potential upstream and downstream impacts due to the change in water elevations and velocities, under varying flow conditions, including flood conditions, resulting from the Remedial Plan; and
 - g) A description of the assumptions, analysis, and methodology used to justify the measures that are proposed in the Remedial Plan;
- 6) The Remedial Plan shall include a schedule of implementation for the work proposed in the Plan, with a completion date of no later than **September 30, 2024**.
 - 7) Beck shall undertake the work described in the Remedial Plan, once approved by the Director, and in accordance with the schedule of implementation as approved by the Director.
 - 8) Beck shall provide the Director with five (5) days' notice either by phone or email prior to commencing the work in the Remedial Plan as approved by the Director.
 - 9) The Remedial Plan must be carried out in a manner that mitigates or minimizes any further adverse effects to the aquatic environment, or to the bed and shore of the Clearwater River.
 - 10) Within 14 days of completion of the requirements of this Order, Beck shall submit to the Director a final written report (the "Final Report"), authenticated by a Professional Engineer describing the work undertaken to comply with this order.

DATED at the City of Red Deer, in the Province of Alberta, this 21st day of June, 2023.



Todd Urquhart, Director
Compliance Manager
Southern Region

Part 9 of the *Water Act* may provide a right of appeal against this decision to the Alberta Environment Appeals Board. Pursuant to Section 116 a Notice of Appeal must be submitted to the Environmental Appeals Board not later than seven (7) days upon receipt of an Enforcement Order. A copy of Part 9 is enclosed. For further information, please visit <http://www.eab.gov.ab.ca/> or contact the Board Secretary at #306 Peace Hills Trust tower, 10011-109 Street, Edmonton, Alberta, T5J 3S8; telephone 780-427-6207; fax 780-427-4693.

Notwithstanding the above requirements, the Parties shall obtain all other necessary approvals or authorizations required to comply with this order.

Take notice that this enforcement order is a remedial tool only, and in no way precludes any enforcement proceedings being taken regarding this matter under this or any other legislation.

Appendix A
Figure 1



Legend
[Red Circle] Bank Access Points
INV37959_Beck_orthomosaic.tif



Alberta
Government

Produced by the Government of Alberta, OpenStreetMap, OpenStreetMap
Base Map Data provided by the Government of Alberta
under the Alberta Open Government License, November 2016
© 2023 Government of Alberta
© 2023 OpenStreetMap contributors, CC-BY, Imagery © Mapbox
© 2023 Terra Services Inc. All Rights Reserved
Information is provided as a public service by the Government of Alberta
Assumes no responsibility for inaccuracies or omissions.



Appendix A
Figure 2

Legend

- Area of Bank Armoring

INV37959_Beck_orthomosaic.tif

1:706

Alberta
Government

Produced by the Government of Alberta, Planning, Operations & Compliance Division
 10000 Jasper Avenue, Edmonton, Alberta, Canada T5J 0S6
 © 2013 Government of Alberta
 All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the prior written permission of the Government of Alberta.