

Information for Residents affected by the Wabamun Lake Ice Heaves – January 2018

Extensive damage occurred as a result of ice heaving on January 2, 2018. This was a result of rapid temperature fluctuations which caused the ice sheet to expand. In this instance, ice pushed against the lakeshore causing heaving of the bank soils, as well as some property damage, along a significant length of shoreline. It is possible that additional heaving may occur this winter and in spring under similar conditions.

In this case, due to the extensive damage and timing restrictions, interim guidance for making an application for four types of remediation approaches have been provided by Alberta Environment and Parks (AEP). The significance and scale of this event are understood and AEP have put together this process that will hopefully expedite remediation approvals for affected residents.

If you are a property owner considering how to mitigate the damage on your land and want options to control immediate erosion and sedimentation:

1. Determine whether the area to remediate belongs to you, the municipality, or the Crown (bed and shore of Wabamun Lake). If it belongs to your municipality contact them for further direction on what the next steps are.
2. If the land to be remediated belongs you, request to undertake landscaping to level shoreline heaving or remove soil ridges and put in place temporary erosion and sediment control measures. This will require filling in the AEP forms completely and emailing to AEP. A *Temporary Field Authorization* and *Water Act* approval may be necessary depending on the proposed activities.
3. If the land to be remediated is Crown owned bed and shore, permission under the *Public Lands Act* and *Water Act* will be required. This will require filling in the AEP forms completely and emailing to AEP.

If you are a property owner considering permanent or long-term engineered solutions:

1. Determine whether the area to remediate belongs to you or the municipality. If it belongs to your municipality contact them for further direction on what the next steps are.
2. If the land to be remediated belongs to you, consider what your approach could be.
 - a. Bank stabilization projects incorporating biological elements will require filling in the AEP forms completely and emailing to AEP. A *Temporary Field Authorization* and *Water Act* approval may be necessary depending on the proposed activities.
 - b. If owners wish to reconstruct shoreline works and use retaining walls, large rocks, gabion baskets, engineered works, etc. this requires a more complicated review and approval process and applications will need to be submitted to AEP through the Electronic Disposition System.

Note: If you have immediate structural issues related to the ice heave, please explicitly explain this in your application.

It is most important to do the work properly to protect the shoreline and the lake. Modifications to shorelines can result in the direct, or indirect, loss of valuable fish and wildlife habitat. Poorly designed or constructed modifications could contribute to shoreline erosion problems. Considering these issues, approvals are required for shoreline erosion control or bank stabilization work under the *Public Lands Act* and *Water Act* as well as coordination with neighbouring properties and your municipality. Each type of approval will require an application [link to forms]. The proposed approach will determine which type of approval you need. In general, approaches that need minimal shoreline construction will take the least amount of time to process as long as the application is completed in full. Again, we

understand the significance and scale of this event and have put together this process that will hopefully expedite remediation approvals for affected residents.

Frequently Asked Questions

1. If the damages are to my private land, not the bank, do I need to get an AEP approval?
 - If the work to be conducted is on private land, no materials or debris are deposited in the lake, and does not require access from the ice, then a municipal development approval may be all that is required.
2. Can I take equipment on to the ice?
 - The short answer is not right away. A *Temporary Field Authorization* is required to take tracked vehicles onto the ice. Site-by-site restrictions may be imposed depending on the application. A good idea for when heavy equipment is on the ice is to use vegetable based oils instead of hydraulic oils to protect the aquatic environment when operating over water.
3. What can I do to control erosion and sedimentation?
 - There are many options for preventing erosion and controlling sediment, search the terms online and consider field guides and other resources provided Alberta Transportation or the cities of Edmonton or Calgary.
4. How long will this take?
 - Generally, approaches that require minimal shoreline construction will take the least amount of time to process as long as the application is completed in full. Please ensure as much detail as possible is provided on your form so an informed and timely decision can be made.
5. What are the forms that need to be filled out?
 - The forms can be located on municipality websites or through the WWMC.
 - The AEP letter that outlines the four types of approvals that will be considered and the application process.
 - The forms 'LS 102' and 'Supporting information' that need to be filled out – unless it's a major modification then it must go through the Electronic Disposition System
 - Sample lake plans and shoreline stabilization techniques
6. Is anyone going to follow up if people do work without an approval?
 - We hope people will consider that taking the time to do the work properly is in the best interests of the lake. However, any construction which has the potential to impact water management or the aquatic environment without first obtaining an authorization may be considered a contravention of the Acts and compliance action may be taken by the Department. The Complaints / Emergencies contact is: 1-800-222-6514, ERC.Environment@gov.ab.ca