

Thompson Watershed Disaster Mitigation Advisory Committee
10:00AM to 2:45PM, Tuesday February 25, 2020
Fraser Basin Council office, 200A-1383 McGill Road, Kamloops
Meeting summary as at March 6, 2020

Meeting Objectives

- Receive update on status of flood projects underway
- Share information about related initiatives underway
- Discuss next steps, future meeting dates

Participants

- Taylor Davis, LiDAR Application Specialist, Terra Remote Sensing Inc.
 - Tom Hansen, Emergency Program Coordinator, Columbia Shuswap Regional District (by phone)
 - Charlie Henderson, Superintendent of Public Works, City of Merritt (to 2:00PM)
 - Kris Holm, Principal Geoscientist, BGC Engineering Inc.
 - Bill Kershaw, Vice Chair/Director, Electoral Area O, Thompson-Nicola Regional District
 - Tom Kneale, Geotechnical Engineer, MOTI*
 - Stuart Larson, Manager of Protective Services, Cariboo Regional District
 - David Major, IT/GIS Coordinator, Columbia Shuswap Regional District (by phone)
 - Al Richmond, Director, Electoral Area G, Cariboo Regional District
 - Steve Schell, Senior Project Manager, South Region, MFLNRORD* (to 1:00PM)
 - Grame Schimpf, Operations Manager, MOTI*
 - Mike Simpson, Senior Regional Manager, Thompson, Fraser Basin Council
 - Gerald Smith, Provincial Planning Officer, Emergency Management BC (EMBC) (by phone, from 1:00PM)
 - Ron Storie, Director of Community Services, Thompson-Nicola Regional District
- * *Ministry of Transportation and Infrastructure*
** *Ministry of Forests, Lands, Natural Resource Operations and Rural Development*

1. Welcome, Introductions, Agenda and Objectives

Mike Simpson welcomed everyone, Secwepemc territory was acknowledged, and introductions were made around the room and on the phone. The agenda was accepted.

2. Meeting Summary from September 16, 2019

The meeting summary from September 16, 2019 was approved. All actions were completed or on today's agenda.

3. Lidar Acquisition and Imagery

Taylor provided an update and overview of the extent of LiDAR and imagery coverage for the project, as well as demonstrations on what the LiDAR data can do. See *TRS update 25feb20.pdf* circulated with this meeting summary for Taylor's presentation. Note that slides 25-29 show the striking ground movement with LiDAR data and detailed resolution, as compared to the photo imagery.

Mike advised those present that since this is an EMBC funded project, the LiDAR data and imagery will be uploaded to Geo BC (a division of MFLNRORD). Mike will promote the

availability of the data with all orders of government in the Thompson Watershed. Geo BC are seeking an open source process, but until that is established, the following is the process:

- Local [or other] government would contact GeoBC (geobcinfo@gov.bc.ca) and we get them to sign data use agreement to get access to data
- Data is shared via external hard drive mailed to the local [or other] government

4. Risk Prioritization and Floodplain Mapping Update

Kris provided an update on the base level floodplain mapping work underway in the Thompson River Watershed (TRW), within the boundaries of the Cariboo Regional District and Thompson-Nicola Regional District. He also provided an overview of the risk prioritization work underway in non-Thompson River Watershed portions of the Cariboo Regional District. See *BGC TRW Advisory Update 25feb20.pdf* circulated with this meeting summary for Kris' presentation.

5. Funding Application Submitted in January 2020

Eight local governments submitted a coordinated application to the [UBCM CEPF January intake is for flood risk assessment, mapping and mitigation planning](#) for a total of \$1M. Barriere, Clearwater, Clinton, Merritt, Sicamous, CSRD, CRD and TNRD were the applicants for flood mapping in the majority of the areas, as well as detailed mapping in Merritt, and detailed risk assessments for alluvial fans in Barriere and Sicamous. Follow up with Mike Simpson if you want more details on what was submitted.

6. Big Questions

The following were discussed in the context of the flood, steep creek and debris flow risk assessment and mapping work undertaken in the TRW, as they were raised by individual local governments since the last meeting.

Liability for Local Governments of Existing Development Now-known Risk Areas

After some discussion, it was agreed by all that it is important to advance this work and understand the risks. Each local (or other order of) government must go through their own processes to determine how to inform residents or businesses in areas of now-known risk. Whether a local government commissions a study, or is the recipient of the study from another organization is also a factor. Liability is also limited in that MOTI approves subdivisions outside of municipalities, not local governments - their role is limited to zoning for land uses in an official community plan. Kris noted that in some jurisdictions, managing geohazards-related liability centers around developing a consistent, transparent risk management decision making process. Key issues include the need to better define "safe for the intended use" and how to apply the "As Low as Reasonably Practicable" principle in risk management.

Utilizing This Information, Updating Provincial Flood Maps

The example was provided about a local government that had updated floodplain mapping done, and then had challenges in having the provincial government accept it. There was uncertainty about which order of government confirms flood maps, or if that is still needed. Challenges of building inspection (largely absent in CRD, portions of CSRD have recently added this service) confounds the issue about knowing about development. Kris noted several reviews underway in different local government jurisdictions that he will share when they are approved: CSRD review of policies and bylaws from the perspective of geohazards

management; CSRD and CRD review of DPA development for geohazards areas. Kris also noted that historical, provincial floodplain maps are not well-suited to manage changing conditions (river change, climate change), and that discussion about “ownership” should include reviewing the state-of-practice for digital geohazard risk and information management and how to manage changing conditions (liability, policy, bylaws, asset management).

Ensuring We’re Working Collaboratively

The provincial government response to the resolution B98 *Resourcing a Collaborative System of Data Sharing in BC* accepted at UBCM was reviewed on screen (see Resolution response Feb 2020.pdf circulated with this meeting summary, or click [here](#)). Draft letter to **EMBC Deputy Minister Lori Halls**, (cc Madeline, Stan, Gerald) with review/input from advisory committee. **FBC** to coordinate drafting the letter with BGC and committee support. Letter to contain proposed actions that will facilitate achieving the strategic goals identified by EMBC. Al Richmond knows Lori and will be the key contact. Key points:

- Role of ICI Society role for asset data management
- Discuss current reality, and desired future reality, for integrated delivery of geohazards knowledge.
- Identify progress made towards integrated provincial scale flood risk assessment, facilitated by FBC and the TRW advisory committee.
- Define recommended changes to how geohazards knowledge is delivered to the Province, which will enable less resource-intensive knowledge sharing, compared to the current reality (i.e. a value proposition).

It was suggested that the [Integrated Cadastral Information \(ICI\) Society](#) also play a role in collecting and disseminating the information, particularly the maintenance of an integrated database of assets (buildings and infrastructure), as they have connections with local government; support technical communications; take data from local government and disseminate it broadly. BC Assessment and all utilities are on the ICI Society Board.

7. What Else is Going On/Information Sharing

This summarizes related initiatives going on that were reported throughout the meeting:

- Charlie noted that the City of Merritt received \$750 000 for structural flood mitigation
- Suggested use of development permit area (DPAs) to identify flood and steep creek area in official community plans (OCPs)
- Geo BC has a RFI out for any areas with LiDAR data with 4 points/km² or higher
- EMBC will be hosting a spring preparedness workshop in Kamloops on March 12
- BGC is convening local governments in late spring 2020 (no exact date yet) on what’s worked well for geohazard risk evaluation and management

8. Next Steps

The following were agreed to as next steps:

- Next Advisory Committee meeting to *possibly* be in spring - Mike will seek a date with a doodle poll about 3 weeks in advance (alternately, early fall)
- To possibly* consider a “big meeting” in fall 2020 similar to February 2018 that launched this project, to invite all orders of government to raise awareness of what

has been created to date, and *to seek input on a critical question that warrants gathering 60-80 people*

- Action items listed in table below

Draft agenda for next meeting:

- Review floodplain mapping results
- Determine next steps - whether UBCM funding approved, or not
- Determine synergies to work collaboratively
- Next steps

List of Action Items

Task	Responsibility	Timing
Follow up with Geo BC to clarify process for orders of government to access LiDAR data and imagery	Mike S	By end of March
Seek funding for bathymetric surveys	Mike S	Ongoing
Follow up on UBCM Resolution response with FBC letter to EMBC Deputy Minister Lori Halls	Mike S	ASAP, March
Determine whether building footprints from LiDAR data acquisition should be shared with BC Assessment Authority	Mike S	By end of March
Share reports and recommendations from CSRD, CRD and RDCK when available	Kris	When available
Arrange for Mike S to speak about this initiative at various events [post-meeting, March 12 in Kamloops was set up]	Gerald	Ongoing
Convene a meeting with GeoBC and EMBC staff to discuss roles and synergies for geohazards information management and data sharing , leveraging the development of existing software tools (e.g. Cambio & COP). The goal would be to define roles for data management, platform development, and specialist support, resourced on a long-term basis	Gerald	Ongoing (from Sept 16, 2019 meeting)
To possibly* consider a “big meeting” in fall 2020 similar to February 2018 that launched this project, to invite all orders of government to raise awareness of what has been created to date, and *to seek input on a critical question that warrants gathering 60-80 people*	Advisory Committee	Fall 2020 at earliest