

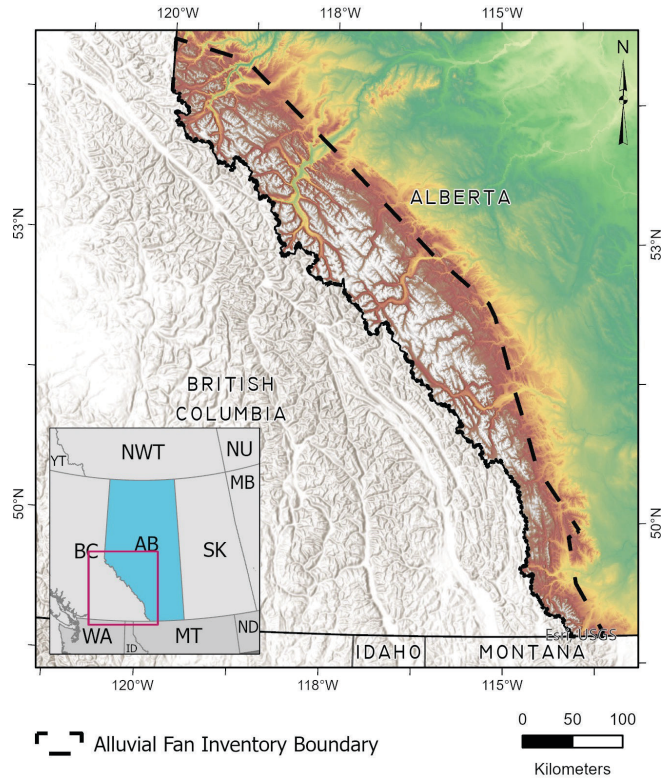
Alluvial Fan Inventory

Understanding and identifying alluvial fan flood hazards is an important step in helping to ensure Albertans and Alberta's infrastructure are as safe as possible from flooding events. The Government of Alberta manages the production of alluvial fan studies and mapping.

The inventory includes information and boundaries of alluvial fans that may indicate the presence of steep-creek hazards to infrastructure and Albertans in the mountainous regions of the province. Hazard types include events such as debris flows and debris floods. The alluvial fans were mapped using a combination of satellite imagery, air photo data, publicly available imagery, and fieldwork. The inventory focuses on alluvial fans near populated areas and infrastructure. However, the inventory is not an exhaustive list of all alluvial fans in the mountainous area of Alberta. The alluvial fan boundaries are approximate as these landforms are dynamic and subject to rapid change.

Alberta's [Flood Awareness Map Application](#) is the best way to view, interact with, and get more information about alluvial fans.

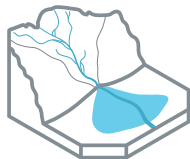
The figure on the right shows the boundary where the inventory was completed. 710 alluvial fans were identified as part of this inventory. Statistical analysis of creek, watershed and alluvial fan properties were completed to assess different hazard types.



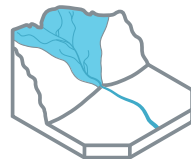
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Name and location of the fan



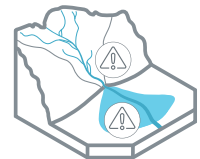
Physical properties of the fan, for example, fan elevations and slope



Physical properties of the watershed, for example, watershed length, area and elevation



Build environment of the fan, for example, whether the fan is in natural condition or is impacted by human activities



Hazard information including:

- hazard type
- hazard chance
- details of channel confinement, avulsion, bank erosion, and outbreak floods susceptibilities

More information about alluvial fan terminologies and processes is available on the [Alluvial Fan Terminologies, Processes and Hazards Fact Sheet](#).